

Lindsay's

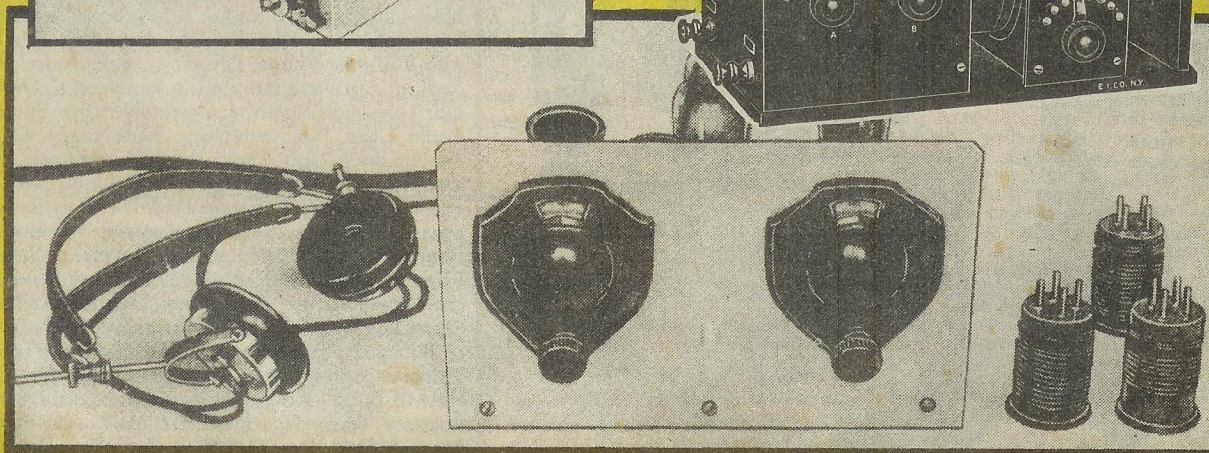
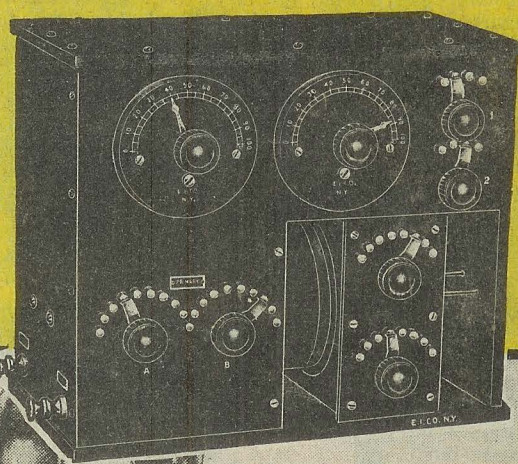
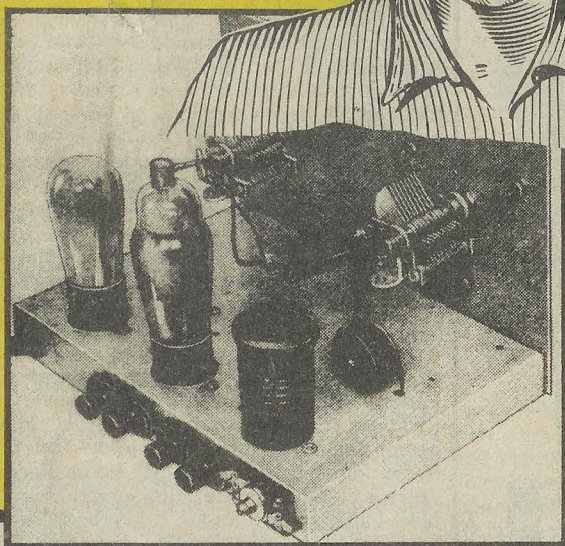
ELECTRICAL BOOKS

Unusual, high quality ? | ? / ?
electrical and
electronics books
from the past and
present...



Great Books!

Vacuum Tubes in Wireless	3
101 Shortwave Hookups	11
Shortwave Coil Data Book	7
1934 Shortwave Manual	11
222 Radio Circuits	5
Wimshurst Machine	24
Neon Signs	31



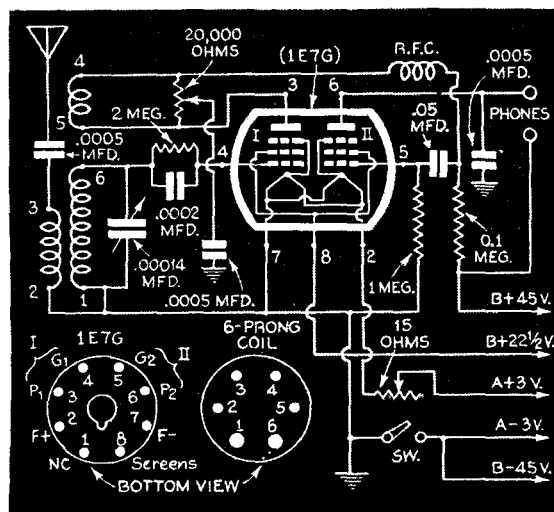
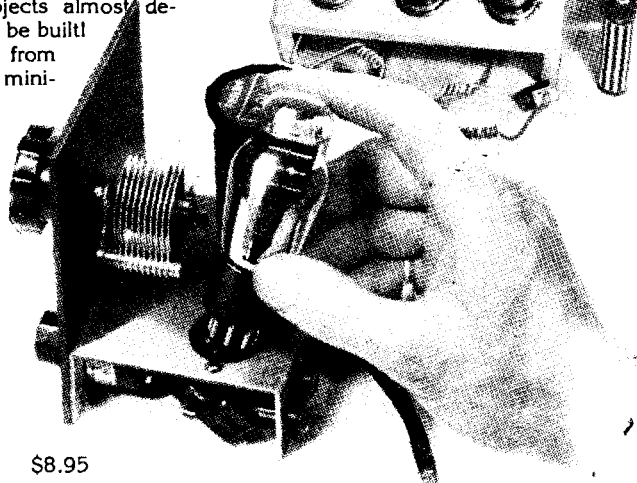
LINDSAY PUBLICATIONS INC

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Great World War II Era Magazine Articles

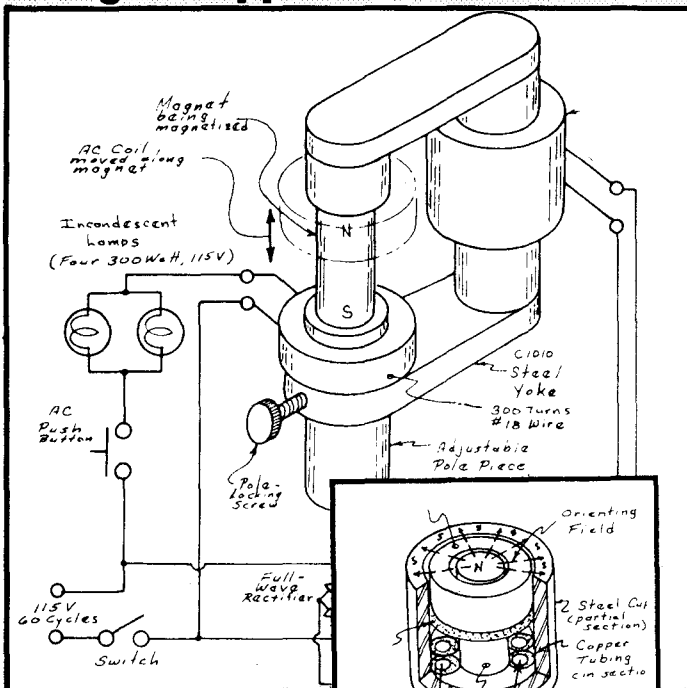


Great stuff from the days before miniature vacuum tubes. Endless enjoyable reading, especially if you remember reading this stuff as a kid. Get a copy of this. You'll really like it. 6x9 paperback 192 pages Cat. no. 20196 \$8.95



One-Control Beginner's Radio; Get Started in Radio; Three-Tube TRF Receiver; One-Tube Loudspeaker Set; Four-Tube Speaker Receiver; Four Dollars Builds This Set; More Power for Your Two-Tube Radio; Homemade "Audio" Telegraph; Three-Tube Phonograph Receiver; Four-Tube TRF Receiver; Inexpensive Dual-Turntable Phonograph; Kitchen Radio; Two-Tube Set Gets Foreign Stations; Two-Way Radio Station; Combination Receiver and Amplifier; "Letter" Radio Can Be Mailed; Build an FM Receiver for \$22; A Tuner for Any Broadcast Set; World's Smallest PA Units; Twin-Bed Radio; Floor-Lamp Radio; Practice Code Sender and Receiver; Pocket Receiver for Sports; Tiny Portable Operates Anywhere; Low-Cost Power Supply; Three-Tube Superhet; Compact All-Wave Set; Two-Tube AC-DC Receiver; Portable Radio-Phonograph; One-Tube Shortwave Set; Sliding Panel Tunes Novel Receiver; All-Wave Bands on Two Tubes; Compact Radio-Tube Tester; Europe on One Tube; Bicycle Radio; "B" Supply for Portables; Priority Receiver Uses New Tuning; Compact Rectifier Unit; Midget Broadcast Set; Week-Enders' Radio; Midge AC-DC Receiver; Book-End Radio for Your Den; One-Tube All-Electric Set; Superhet for Beginners; Pocket-Size Radio Tester; "Wireless" Radio Phonograph; Low-Cost Home Recorder; Tom Thumb Radio; Suitcase Phonograph; Two-Tube Portable; Library-Table Radio; All-Purpose Portable; One-Tube Receiver; High-Fidelity Amplifier; Small Radio with 400-Mile Range; Dressing-Table Radio; Unit Kills Fading; All-Wave Amateur's Receiver; Camper's Radio; Television Antenna; Universal Power Supply; Tiny Radio Uses Two Detectors; Portable AC-DC Signal Tester; Book-Light Radio; Around-the-World Receiver; Two-Tube Radio Phonograph; Cabinet Ideas; Cane-and-Seat Radio; Vacation Portable; Bed Radio; Suppressor Reduces Static; Emergency Receiver; Light-Beam Transmitter; Blackout Receiver; Vest-Pocket REceiver; Football-Fan's Radio; Pocket-Notebook Radio; Novel Lamp Radio; Pilot Lights, Rectifier Tube, Squealing, Paper Tubular Condenser; Various Causes of Humming; Bring Your Radio Up to Date; REception, Volume Control, Dead Speaker, Connecting a Pickup; How to Build a Loop Antenna; Line-Cord Breaks, Dial Pointers, Fuzzy Operation, Ballast Tubes; Fixed Condensers, Reception, Fade Out, Humming; How to Refinish Your Radio Cabinet; Faulty Heater, Extending Reception, Noisy Condenser, Midget Circuit; Neon Condenser Tester, Defective Resistors, Pilot Light, Fading Reception; Battery Testing, Loop Antenna, Substitute Batteries, Loose Batteries; How to Correct Dial Troubles

Permanent Magnet Design & Application Handbook!



PERMANENT MAGNET DESIGN & APPLICATION HANDBOOK

by Lester Moskowitz

Back in print! For now at least... The best magnet book I've seen.

Opening this book gives you the feeling you've opened the lab notebook of a famous magnet scientist. It's loaded with drawings, diagrams, equations, notes, hints, tips, circuit diagrams and more.

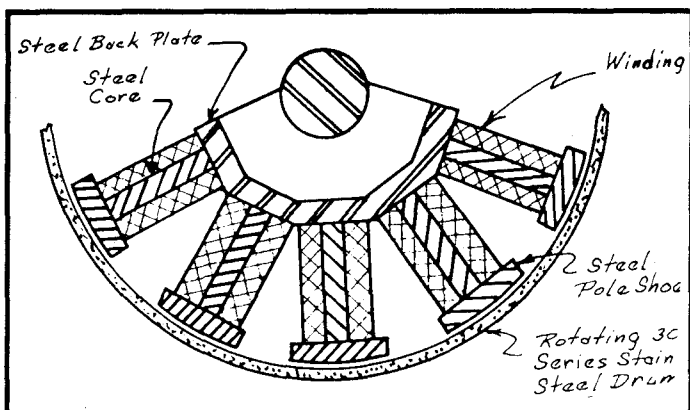
Chapters include brief history of magnets, terms and definitions, classification of magnets and materials, basic manufacturing processes, fundamentals of magnetism, general design considerations, leakage and fringing, circuit effects, exact design methods, and on and on.

You get all kinds of information and making, testing and using magnets from a circuit diagram for a 100 joule impulse magnetizer to suggestions for use in magnetic drives, motors and magnetos, magnetic welding benches and much more.

Expensive! But the best book of its type I've ever seen. Just the right mix of theory and practical application. Rare information. If you think you'll ever need it, get it now. It went out of print once, and is being reprinted (probably only for a short time) by another small publisher. I'm glad to see it's back. 9x12 hardcover 443 pages heavily illustrated

Cat. no. 1149

\$65.00



VACUUM TUBES in Wireless Communication

NEW!

Vacuum Tubes
in Wireless Communication
by Elmer E. Bucher

In 1919 radio had proven itself in the just-ended First World War. Radio's future looked bright.

The author explained his purpose in writing this book:

"In preparing the text of this book, the author had two principal objects in view: (1) to provide the Government and commercial wireless operator with a brief and simple explanation of the functioning of the circuits of the vacuum tube, (2) to lay before the experimenter and the practical operator the numerous circuits employed from time to time in the laboratory and in commercial practice."

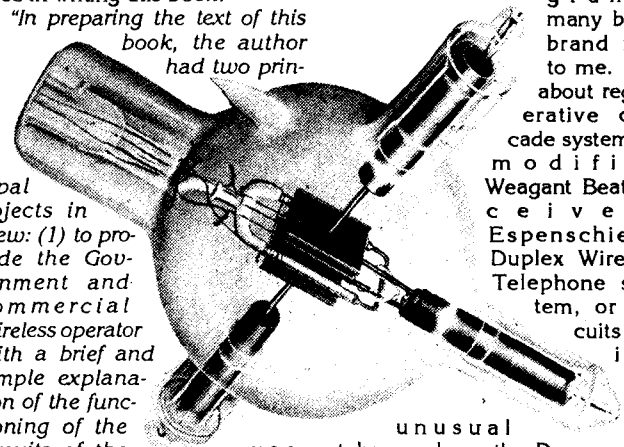
Outside of its obvious commercial value, the perfected vacuum tube affords the experimenter a most fascinating field of research. This is well evidenced by the fact that a single bulb with associated tuning apparatus connected to a four wire aerial 200 feet in length permits wireless signals to be received over distances 2,500 to 4,000 miles in daylight, and up to 6,000 miles in darkness."

On the title page is another description that says it all. "This volume shows over 140 different circuits for the practical use of Vacuum Tubes as Detectors, Radio or Audio Frequency Amplifiers, Regenerative Receivers, Beat Receivers, and Generators of Radio Frequency Currents."

The Two, Three and Four Element Oscillation Values are described in detail together with the circuits used in daily practice. Cascade Amplifiers of the latest type for long distance reception are comprehensively

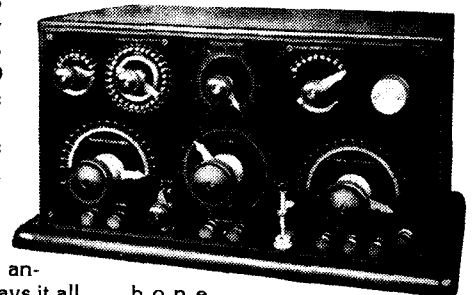
treated. Up-to-date circuits for long distance receptions are comprehensively treated..."

This almost all circuit diagrams, many being brand new to me. How about regenerative cascade systems, a modified Weagant Beat receiver, Espenschied's Duplex Wireless Telephone system, or circuits using



unusual tubes such as the Dynatron, the Pliodynatron, the Kenotron, or the Pliotron? Back then, this book described the cutting of technology as radio began to move away from spark gap code transmission to continuous wave methods using tubes.

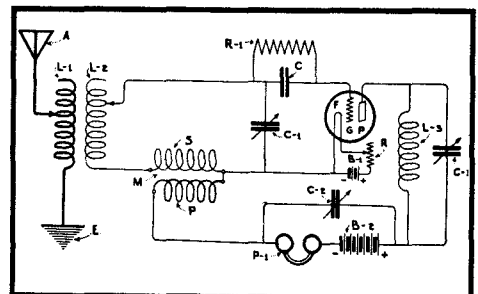
This is a great collection of very unusual radio history — something you don't find everyday. 'Course I know a lot of



bone heads who would be just as happy if they NEVER found it any day. But don't you be one of them. Consider this carefully. Its unusual. 5 1/2 x 8 1/2 paperback 208 pages

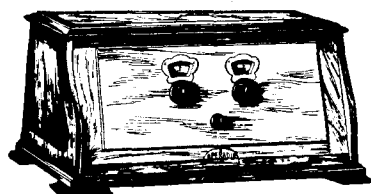
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\$12.95



Radio of the 1920's

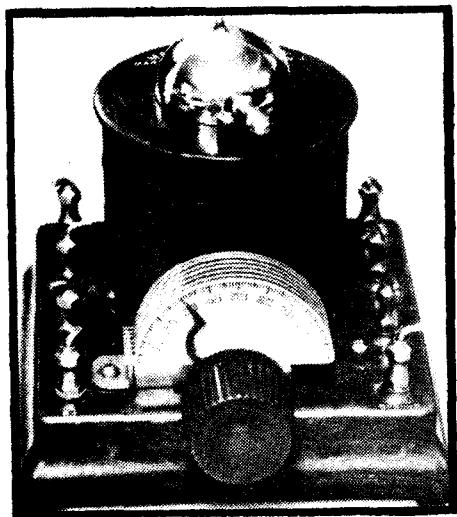
Volume 2



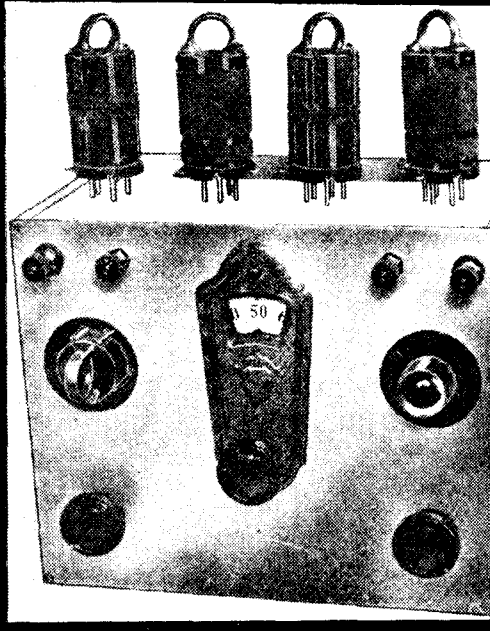
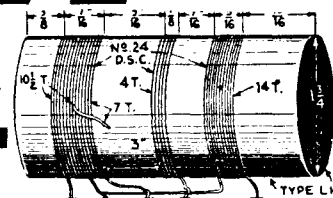
RADIO MANUFACTURERS OF THE 1920'S Vol 2
by Alan Douglas

More of the same great material found in Volume 1! You'll find ads, technical diagrams, factory photos, and history on radios produced by 31 different manufacturers listed alphabetically from Freed-Eismann through Priess. Manufacturers A through E can be found in volume one. You get wall-to-wall illustrations in this large 266

page book that are guaranteed to keep you drooling for hours. Educational, inspirational (if you build old radios), and just plain fun! Get a copy! 8 1/2 x 11 paperback 266 pages Cat. no. 368 \$22.95



How To Build & Operate SHORTWAVE RECEIVERS



CONTENTS

The SWC Two Tube Portable
How to Operate a Shortwave Receiver
Two Volt Two Tube Receiver
A "Plug-Less" SW Receiver
The Short Wave, Screen-Grid Craft Box
Here's That 1-Tube SW Receiver
How to Obtain Smooth Regeneration
SW Receivers
Fine Results with Tapped Coils
A Short Wave "Fun Box"
How to Build Really Efficient SW Converters
One-Coil Super-Het Converter
Short Wave Converter with "B" Supply
SW Reception with Super-Regeneration
Super-Regenerative Receiver
New - Short Wave Superregenerator
"My Favorite" Short Wave Receiver
The "HY7B" Super-Het
The "Egert" SWS-9 Super-Het
A Super-Sensitive Short Wave Receiver
Combination Long and Short Waver
Adding 2 Stages RF to Hammarlund Receiver
Short Wave Tuning, Less Plug-In Coils
The "Ham's Own" Receiver
The Superior Short Waver Receiver Used at "G2DT"
How to Build a Good Television Receiver
My Favorite Audio Amplifier
An SW Power Amplifier
Time Zone Chart
How to Gain Detector Sensitivity
How to Use RF Chokes
Practical Hints on Reception
Adding Untuned Stage to SW Converter
A "Separate" Regeneration Tube
Coil and Condenser Data

How to Build & Operate Short Wave Receivers

by Short Wave Craft Magazine
reprinted by Lindsay Publications

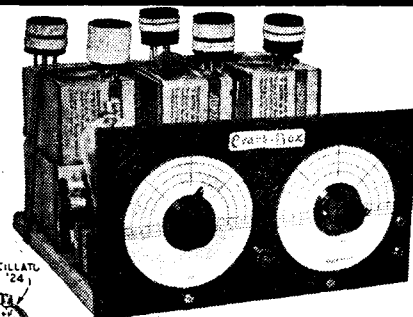
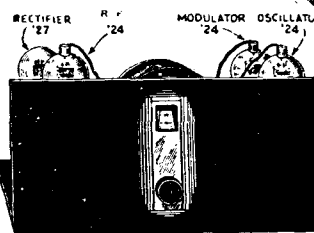
"Including Receivers for Beginners, Short Wave Converters, S-W Superheterodynes, Super-Regenerators, Television Receivers"

In his preface publisher Hugo Gernsback wrote, "The present volume is a combination of a great deal of the best constructional, Short Wave material that has come out during the past year. All of the circuits have been brought up to date, and there will be found here much that is new for the experimenter in short waves."

We have carefully sought to keep the contents up to the title of the book, and you will find that it is 100% 'How to Make and Operate.'

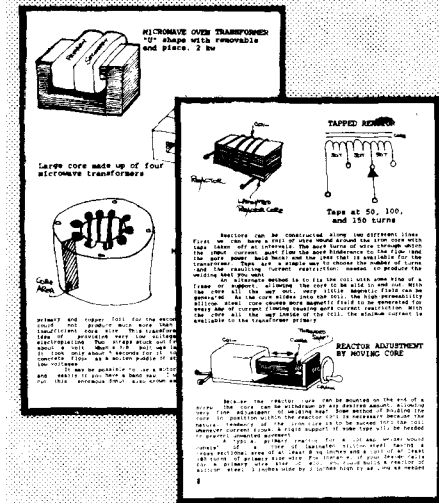
And it sure is. Jam packed in this fascinating little book are the best articles from back issues of Short Wave Craft magazine. We call it 1934 because that's the year it was published. Yet the preface and the original copyright carry a 1932 date.

You'll learn how to build bandswitching receivers, high performance multi-tube sets, power audio amplifiers, RF amplifiers, and much more. You'll enjoy the ads for parts, other books, and even experimental television systems using the old Nipkow scanning discs.



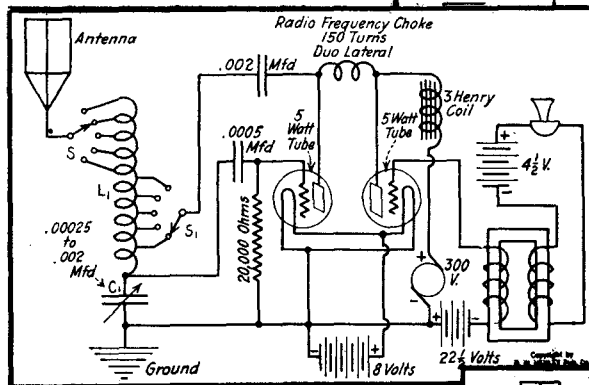
Even if you never attempt to build any of this equipment, you'll still find this enjoyable reading. This is one of those low cost booklets advertised in the back of the early radio magazines that were published by the thousands but have now practically disappeared. You get all 72 original pages.

Interesting little publication. One of those booklets I read cover to cover a hundred times as a kid. I never thought I'd get my hands on another copy. You'll like it. Order a copy. 8 1/2 x 11 paperback 72 pages well illustrated Cat. no. 20129 \$7.95

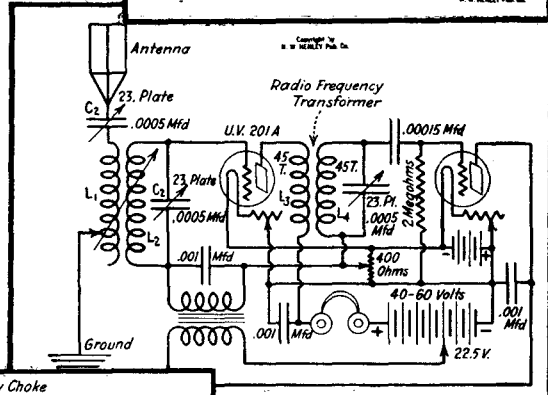
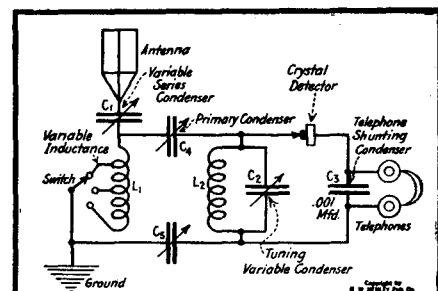


\$4.00

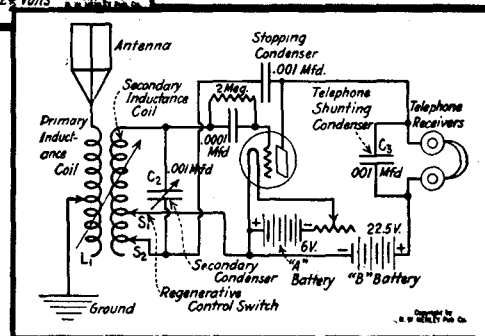
The subtitle reads: "A comprehensive and up-to-date collection of modern receiving and transmitting circuits with complete design data showing the electrical values of inductances, capacities and resistances with the name of each element



- one tube reflex with crystal detector
- three tube reflex with RF transformers
- inverse reflex
- CW receiver with BFO
- three tube neutrodyne

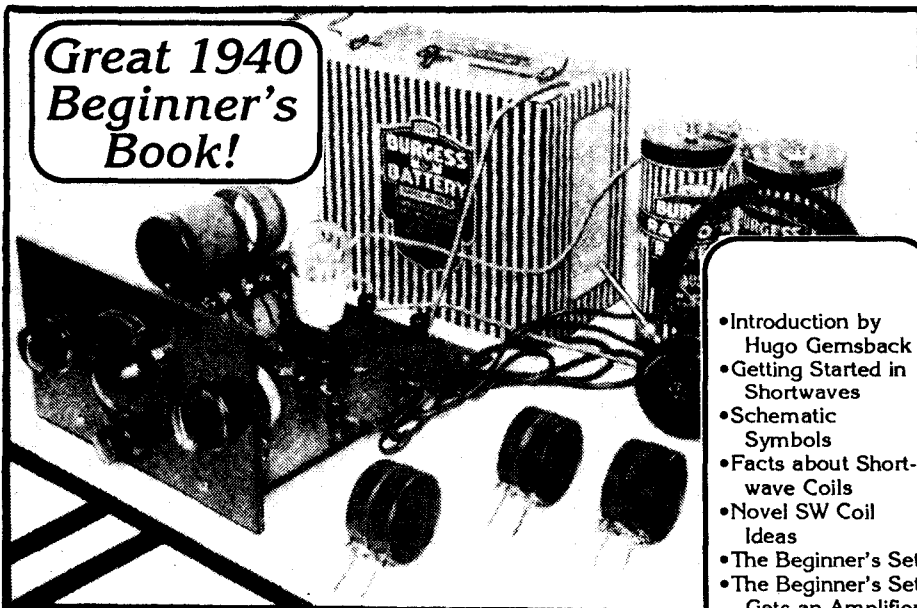


***Incredible
collection
of radio
plans from
1924!***



\$11.95

**Great 1940
Beginner's
Book!**



- Introduction by Hugo Gernsback
- Getting Started in Shortwaves
- Schematic Symbols
- Facts about Short-wave Coils
- Novel SW Coil Ideas
- The Beginner's Set
- The Beginner's Set Gets an Amplifier
- Smoothing Up the Regeneration Control
- New Kinks for the SW set
- Which Regeneration Scheme?
- Tuning the Short Wave Receiver
- How to Make Worth-While Audio Amplifiers
- Short Wave Operating Hints
- Coupling the RF Stage to Detector
- Audio Amplifiers for SW Sets
- Methods of Coupling to Speakers
- Aerials for Short-Wave Receivers
- Good Antenna Design
- Some Things You Don't Know About Aerials
- Learning the Code
- Home-Made Antenna Coupling Condensers
- A Panel Mounting SW Coil Assembly
- A Meter-Kilocycle Conversion Chart

Shortwave Beginner's Book

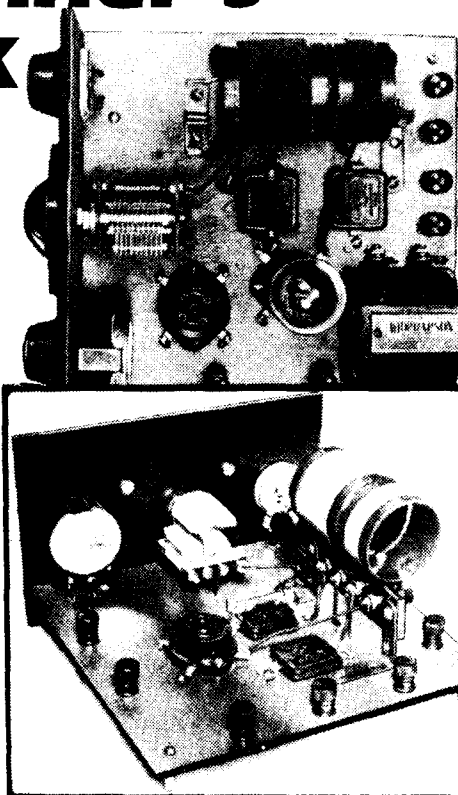
**SHORTWAVE
BEGINNER'S BOOK**
by Radio & Television
Magazine
reprinted by Lindsay
Publications

The full title is "Short Wave Beginner's Book including a complete course of instruction in shortwave; details for making short-wave aerials; a complete beginner's set; coil winding data; operating kinks." And it's 36 pages of dynamite ideas from 1940.

Short Wave Beginner's Book was targeted for the raw beginner. It explains everything in detail, showing the reader not only the schematic but diagrams of what wire to hook where. Even templates are provided for drilling the chassis. Very little is left to the imagination.

True, the sets are not overly sophisticated, but they're a great place to start. For instance the beginner's set uses a single 30 vacuum tube with a 45 volt B battery. In the next chapter another 30 tube is added as an audio amplifier.

You get excellent discussions on topics such as coupling amplifier circuits, insulators



that can be used on shortwave antennas, and code practice oscillators. And everything is nicely illustrated.

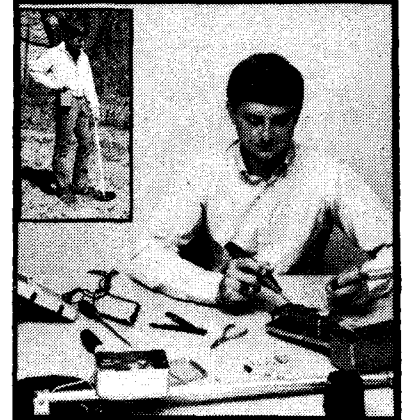
Here's another fun old-time shortwave radio book you should have. And it's reasonably priced! It's another **MUST** for your old time radio book collection. Order a copy. 7x9 book-let 36 pages

Cat. no. 4961

\$4.95

Build a METAL LOCATOR and search for treasure!

2706 BUILDING
METAL LOCATORS
A TREASURE HUNTER'S
PROJECT BOOK
CHARLES D. RAKES



BUILDING METAL LOCATORS
A Treasure Hunter's Project Book
by Charles D. Rakes

Metal detectors are fun to play with — profitable, too, if you "shoot" coins. You can locate "treasure", tools that kids drug into the backyard and lost, studs and pipes in the walls, or frisk your mother-in-law to see if she's carrying a handgun when she comes over for Thanksgiving dinner.

BFO metal detectors are neither hard to design nor build. And chapter two will show you how to build one. But it's the plans for all the other high-performance specialized detectors that make this book shine. You'll be shown how to build balance inductance locators, transmitter/receivers, coplanar VLF locator, and some other unusual designs. You even get a chapter on how to begin treasure hunting.

Believe it or not, the circuit board can be the easiest part of a detector to build. Winding coils is usually more difficult, but you will be shown all the secrets and taught all the techniques. If you like to build useful electronic projects, try this! You can build a detector for little money that will perform as well as the high priced models. Interesting book. Rare information. A book worth having. 5 1/2 x 8 1/2 paperback 116 pages

Cat. no. 352

\$9.95

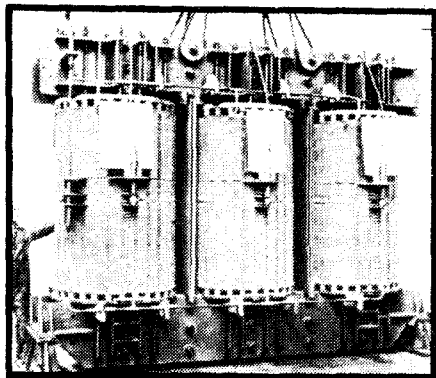
Introduction to MAGNETISM

Not too
simple

Not too
complex

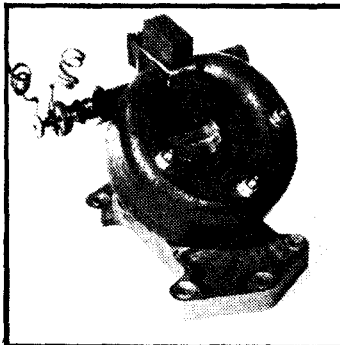
Just
right!

MAGNETISM — An
Introductory Survey
by E. W. Lee



The back cover of this book explains it all very well...

"The lodestone was known to the ancient Greeks; the Chinese knew of the compass a thousand years ago; in the 16th century Gilbert described magnetic poles. Professor Lee takes us through the early experiments to the first modern accomplishments of Oersted,



Ampere and Faraday. We then learn the principles behind electric

motors, dynamos, transformers, permanent magnets, synchrotrons, solenoids, memory banks in computers, betatrons, magnetic supercooling, and other modern applications....

"The author shows us how magnetism 'works,' with reference to such concepts and principles as lines of force; ferromagnetism; the atomic theory of matter in relation to electromagnetic properties; paramagnetism and diamagnetism; quantitative measurement of magnetic force; domains and

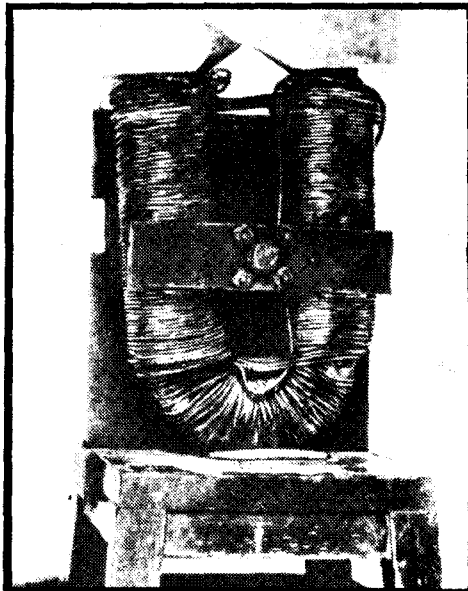
domain boundaries; high-permeability alloys, their theoretical basis and uses; magnetic matrices used as computer-age storage devices; ferromagnetism and antiferromagnetism; the use of magnetism in modern scientific research; and problems of the earth's magnetism, including its meaning to Wegener theory of continental drift and solar phenomena."

You get 60 diagrams and sketches and more than 32 pages of photographs. If you want to explore the theory, you can study the mathematics that explains magnetism.

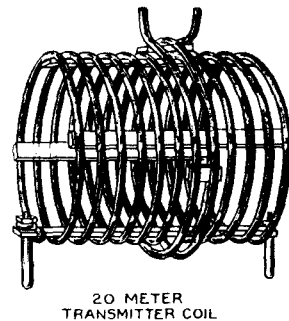
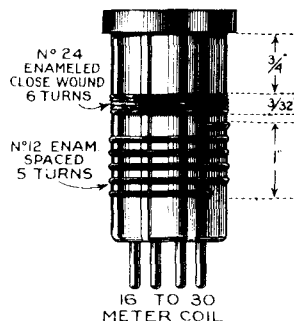
This is one heck of a lot of book for the money. And it's must reading for basement engineers, experimenters, even the guy who's trying to build a magnetic motor or perpetual motion machine. Great background information. Order a copy. 5 1/2 x 8 1/2 paperback 281 pages

Cat. no. 365

\$6.00



SHORT WAVE COIL DATA BOOK

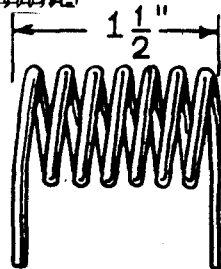
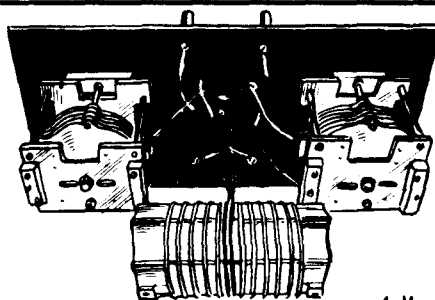


SHORTWAVE COIL DATA BOOK

by Radio Publications

Coils! Coils! Coils! They're the heart and soul of shortwave radio receivers and transmitters. A properly wound low-loss coil can make the difference between having an average piece of gear or a hot performer. And it seems the simpler the receiver, the more important the coils.

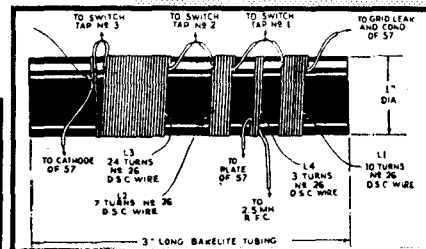
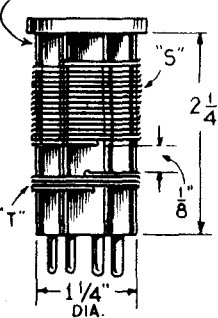
Here in one jam-packed booklet from 1937 are hints, tips, charts to help the shortwave radio builder design and build the best coils possible. You get informative articles from *Gernsback* magazines such as



- Coil Data for TRF Receivers
- The One Tube Oscillodyne Coils
- The Mono-Coil
- 2 Winding Coils for 10-500 Meters
- Coils for a 3 Tube Band Spreader
- and many others

You also get nine different circuit diagrams for the "Most Popular SW

RIBBED COIL FORM



Tuning Circuits" and five "Transmitting Circuits employing the coils described".

This is highly specialized information on just one important topic essential to successful radio construction. It's only 16 pages but it's quite inexpensive and delivers. Get a copy! 8 1/2 x 11 booklet 16 pages

Cat. no. 830

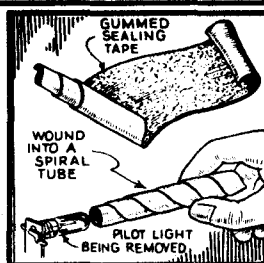
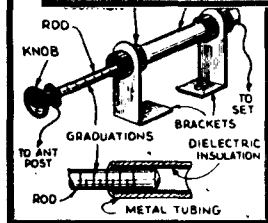
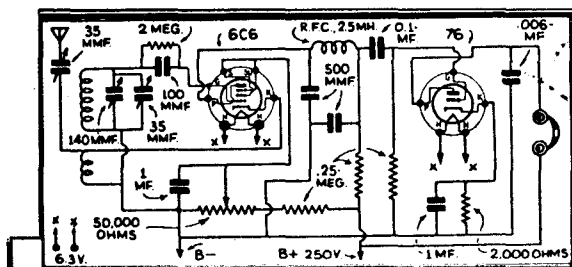
\$1.95

Shortwave Quiz Book & Kinks!

Fantastic 1938 Collection of Hints & Tips

You Get

- SW Receivers for 110 VAC Operation
- AC-DC Receivers
- Battery Type SW Receivers
- Short-Wave Antennas
- Antenna Hints
- Short-Wave Converters
- Pre-Amplifiers
- Miscellaneous SW Hints
- Beat Oscillators
- Power Supplies
- Audio Amplifiers
- A Folded Doublet to Save Space
- How to Get Best DX
- Simple 1-Tube Booster
- A Twin Pentode Receiver for the Beginner
- Kinks for SW "Fan"
- Easy-to-Build Short Wave Transmitters
- Code Practice Oscillators
- 5-Meter Receivers
- "Ham" Kinks



Short Wave Radio QUIZ BOOK AND KINKS

by Short Wave & Television Magazine
reprinted by Lindsay Publications

Short Wave & Television Magazine frequently published reader's questions and answers as well as small "fillers" of circuits, hints, tips and kinks. In 1938 a collection of these tiny articles was reissued in this 64 page book.

You'll get tips on winding coils, bending chassis, soldering phone tips, making a lighting arrestor from a spark plug, plans for a rf

amplifier, a 2 tube SW set, another for a motorcycle, a 2 tube battery set, a 6.3 volt 3 tuber, and on and on. There are hundreds of hints and kinks here!

You'll wish the stories were longer, but there are so many great ideas (some a little ridiculous) that you won't complain. It's fun reading. I like it, and I think you will, too. Order a copy. 5 1/2 x 8 1/2 paperback 64 pages
Cat. no. 4945 \$4.95

1928 RADIO TROUBLE-SHOOTING

1928 RADIO TROUBLE-SHOOTING

by Enno R. Haan

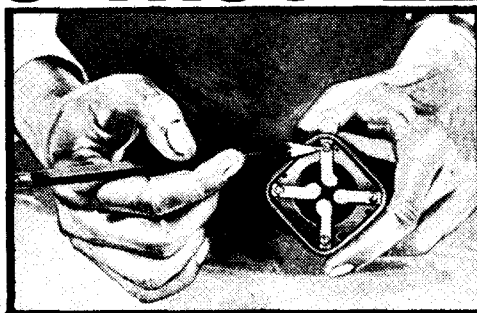
reprinted by Lindsay Publications

"A Complete and Practical Work on Radio-Receiver Troubles and How to Cure Them".

That description might sound somewhat bland, even dull, but this book is anything but that. When you open the covers of Radio Trouble-Shooting, you'll discover beautiful illustrations, dozens of schematics, many charts and diagrams detailing radio technology not seen in decades.

Chapters include tools and instruments, uncontrollable troubles and interference, antenna-circuit troubles, batteries and chargers, battery eliminators and their troubles, tube troubles and their remedies, internal disorders in radio receivers, reproducer troubles and maintenance.

In 1928 radios were generally battery powered, the tube plates usually being connected to several 45 volt B+ batteries, with the family automobile battery powering the tube filaments. It was a real hassle hauling the car battery into the house everytime you wanted to



listen to the radio, and 45 volt B batteries were quite a drain on the wallet. It's not surprising that everyone wanted a battery eliminator that could convert 110 volt AC into radio DC voltages. It's not surprising that numerous pages are devoted to batteries and eliminators, their care and repair.

You'll learn how to erect large

outdoor antennas and connect smaller indoor loop antennas. Discover how to test tubes and reactivate them. And you'll even find an incredible characteristic chart of rarely seen battery and AC tubes such as the Daven MU-6, the Schikerling MU-20, the DeForest DV-7, the Western Electric 205D and many others.

To cure internal disorders you'll have to know how to troubleshoot the tuning circuit, analyze grid circuit and plate circuit troubles, control regenerative radiation, how to neutralize a neutrodyne, and even troubleshoot the state-of-the-art superheterodyne.

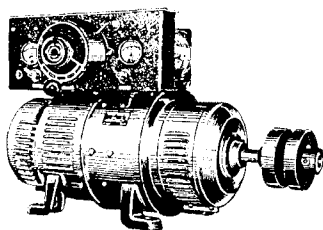
The chapter on reproducers seems quaint today. You'll learn how to care for headphones, how to eliminate B+ voltages from the loudspeaker circuit, and more. And we're about talking horn speakers and old-time earphones.

This is fun reading with great illustrations

throughout. 1928 Radio Trouble-Shooting is more than just a repairman's textbook, it's a snapshot of early radio technology at a time when shortwaves were making radio exciting for everyone. Get in on the fun. Order a copy. This is an excellent early radio book worth having. 5 1/2 x 8 1/2 paperback 328 pages
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12 Shortwave Receivers from Hammarlund!

Great 1937 Plan Book!

HAMMARLUND SHORT WAVE MANUAL
Third Edition

reprinted by Lindsay Publications Inc

For only ten cents you could by this 32 page booklet and choose which of the twelve different shortwave radios you wanted to build. These were the depression years, and Hammarlund, one of the most reputable manufacturer of radio parts, was eager to sell you what you needed to build a low-cost receiver.

You'll like this! The plans offer interesting detailed text that makes construction easy along with the basic schematic diagram, a parts connection diagram, tube pin layouts, coil charts and lots of photographs. I haven't seen any plans better done than these!

You get—

- A Boy Scout's S.W. Receiver
- ARRL Ham Receiver
- The Argonaut
- The AC-DC 2 Tube S.W. Receiver
- Doerle 2-Tube Receiver
- The Dragnet
- The Gainer
- The Pentaflex
- A Power Pack for S.W. Receivers
- Radio Amateur's Handbook 3-Tube Band Spread AC set
- The Ray Five Meter Set
- The Skyscraper
- A Three Tube S.W. Pentode Receiver

This is great stuff! For instance the "AC-DC 2-Tube SW Receiver" uses two double tubes, a 6F7 as an untuned RF amplifier and a tuned regenerative detector, and a 12A7 as audio amplifier and rectifier. The circuit is surprisingly simple, and yet I'm sure it performs very well!

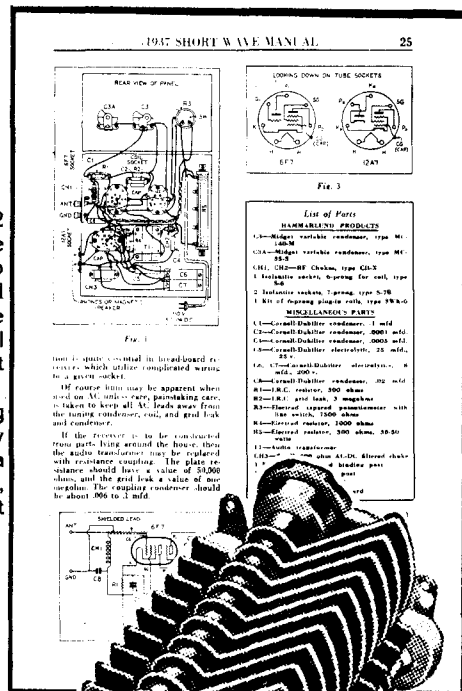
The "Pentaflex" uses a single 6A7 pentagrid converter tube as a regenerative detector and as an audio amplifier. This could be fun to build.

And the "Ray Five Meter Set" is a three tube super-regenerative set for the then-experimental band of 5 meters (about 60 mHz). Back then a five meter set was a marvel!

And there are nine other circuits plus a battery eliminator project.

This is fun reading and a great source of construction ideas. Get a copy of this. The price is reasonable and the content is super. Order a copy today. You'll enjoy it. 5 1/2 x 8 1/2 booklet 32 pages
Cat. no. 4937

\$4.95



S. W. Receiver

THIS manual high frequency receiver is the most complete and up-to-date ever published in the "New York Sun" by Long Martin.

Though but two tubes are used, the tube receiver has an untuned RF stage, a tuned regenerative detector and audio amplifier, and a rectifier. It is remarkably simple, and yet I'm sure it performs very well!

The "Pentaflex" uses a single 6A7 pentagrid converter tube as a regenerative detector and as an audio amplifier. This could be fun to build.

And the "Ray Five Meter Set" is a three tube super-regenerative set for the then-experimental band of 5 meters (about 60 mHz). Back then a five meter set was a marvel!

connected to the grid and Choke is connected to the plate and the output of the 6F7 is the filtered or capacitor load output.

Rectification of the power voltage is accomplished by the diode section of the 12A7 which is connected with a variable capacitor for this purpose. The basic connection of the two tubes used in this receiver are shown in Fig. 1.

It is important that the filament of the tubes and the connections to the rectifier be made exactly as shown. The terminal of the power plug have been labeled with letters and these wires must be traced carefully when wiring the receiver. The 12A7 heater must be in that side of the line labeled "negative" side there is a possibility of radio interference heater leakage also being rapidly and exactly the same.

The receiver should be placed where conditions are best for this receiver. It should be placed in a room where it will be quite a distance away. It should be placed in a room where it will be quite a distance away. It should be placed in a room where it will be quite a distance away.

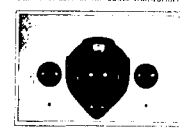


Fig. 1

1937 SHORT WAVE MANUAL

25

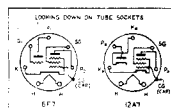
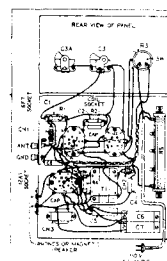
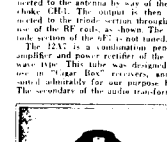
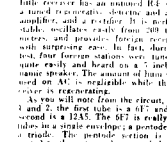
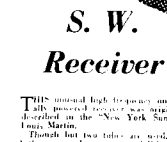
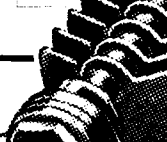
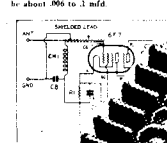


Fig. 3

List of Parts

- HAMMARLUND PRODUCTS**
- 1. 6F7—Double diode vacuum tube, type 6F7
 - 2. 12A7—Double diode vacuum tube, type 12A7
 - 3. 6A7—Double diode vacuum tube, type 6A7
 - 4. 6A7—Double diode vacuum tube, type 6A7
 - 5. 6A7—Double diode vacuum tube, type 6A7
 - 6. 6A7—Double diode vacuum tube, type 6A7
 - 7. 6A7—Double diode vacuum tube, type 6A7
 - 8. 6A7—Double diode vacuum tube, type 6A7
 - 9. 6A7—Double diode vacuum tube, type 6A7
 - 10. 6A7—Double diode vacuum tube, type 6A7
 - 11. 6A7—Double diode vacuum tube, type 6A7
 - 12. 6A7—Double diode vacuum tube, type 6A7



WITCHES & WITCH HUNTING



THE MALLEUS MALEFICARUM

of Heinrich Kramer and James Sprenger
translated by Rev Montague Summers

The copy from the back cover says it better than I can:

"For nearly three centuries *Malleus Maleficarum* (The Witches Hammer) was the professional manual for witch hunters. This work by two of the most famous Inquisitors of the age is still a document of the force that era's beliefs. Under a Bull of Pope Innocent VIII, Kramer and Sprenger exposed the heresy of those who did not believe in witches and set forth the proper order of the world with devils, witches, and will of God. Even if you do not believe in witchcraft, the world of 1484 did.

Contemporary cases illustrate methods by which witches attempt to control and subvert the world: How and why women roast their first-born male child: the confession of how to raise a tempest by a washwoman suspended 'hardly clear of the ground' by her thumbs; methods of making a formal pact with the Devil; how witches deprive men of their vital member; and many others. Methods of destroying and curing witchcraft, such as remedies against incubus and succubus devils, are exemplified and weighed by the authors. Formal rules for initiating a process of justice are set down: how it should be conducted and the method of pronouncing sentence; when to use the trial by the red-hot iron; how the prosecutor should protect himself; how the body is to be shaved and searched for tokens and amulets, including those sewn under the skin....

Unabridged republications of the 1928 edition...."

If you believe in this sort of stuff, you'll find it scary, and I DO NOT RECOMMEND that you conduct a witchhunt in your neighborhood.

For the rest of us, this is really interesting reading. Flat out bizarre! This book makes every day of the year Halloween!

Get a copy of this. EVERY man should have a copy this so he can protect his vital member against witches. (Reminds me of one my old girlfriends. But that's another story....) Excellent book. Very unusual. Order a copy. 6 1/2 x 10 paperback 278 pages

Cat. no. 754

\$7.50

Official 1934 Shortwave Radio Manual

Official 1934

SHORT WAVE RADIO MANUAL

edited by Hugo Gernsback & H W Secor
new chapter by T. J. Lindsay

Build simple, high-performance old timeA shortwaver radios! You can. All of the secrets are here: the circuit diagrams, parts layout, coil specifications, construction details, operation hints, and much more.

Back in the 20's and 30's the only low-cost way of listening in on the newly discovered and fascinating shortwave radio frequencies was to build a set. Shortwave construction magazines flourished, even during the depression.

This is a compilation of construction articles from "Short Wave Craft" magazine. It's wall-to-wall how-to.

At the rear of the book are circuit diagrams, photographs, and design secrets of all short-wave receivers being manufactured in 1934 including some of the most famous: SW-58, the SW-5 "Thrill Box", the deForest KR-1, the Hammurand "Comet Pro", and many more.

You'll find that all the circuits use tubes since transistors hadn't yet been invented. And you'll also find that the original tubes listed are usually difficult to find today. Included is a new chapter showing how you can use transistors to replace hard-to-find vacuum tubes. You'll even see the circuit that was lashed together on a table top one night using junk box parts, one of my wife's hair curlers and alligator clips. When I hooked it up to an antenna strung across the basement ceiling and attached a 9 volt battery, signals started popping in like crazy. In a couple of minutes I heard an urgent message from a ship's captain off Seattle asking for a navigator to help him through shallow water. Not bad, considering I live near Chicago!

These small regenerative receivers are extremely simple, but do they ever



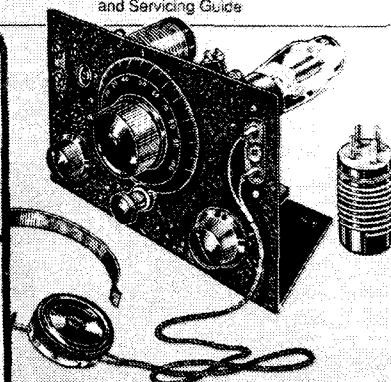
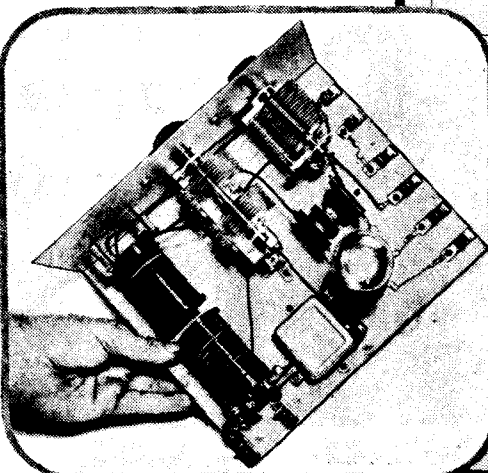
perform! I've built dozens of them, and they never fail to amaze me! Even master machinist, Dave Gingery has built these sets.

This is the nuts for the experimenter, the survivalist who is concerned about basic communication, shortwave listeners, ham radio operators who collect old receivers, and just about anyone interested in old-time radio.

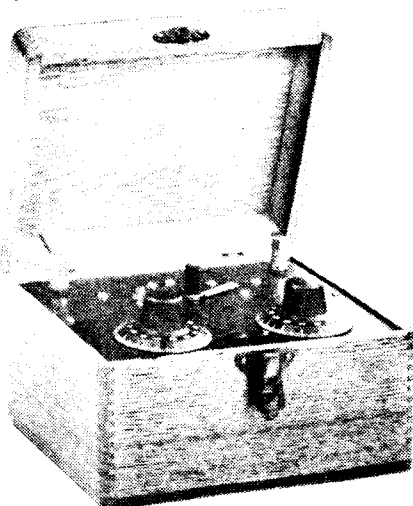
Great book. Best old-time radio book I've ever seen. And I look at every one I can get my hands on. Consider it carefully. Even if you never build one of these radios, you'll get hours of enjoyable reading out of this book. Top rate. Order a copy. 8 1/2 x 11 paperback 260 pages
Cat. no. 4643 \$14.95

1934 Official SHORT WAVE Radio Manual

Complete Experimenter's Set-Building and Servicing Guide



reprinted by Lindsay Publications Inc

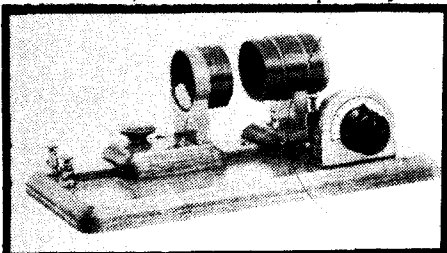


RADIOS THAT WORK FOR FREE!

*Build a High
Performance
Crystal Set!*

RADIOS THAT WORK FOR FREE
by K.E. Edwards

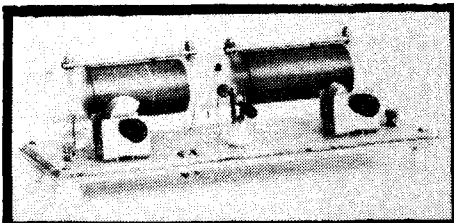
Build yourself a crystal set! You'll be shown everything you need to know - from materials to tools to techniques. Edwards will show you how to build "hot-rod" crystal sets with fancy features that can outperform the old oatmeal box versions, but are still simple. If you've



never built anything electronic at any time but would like to try, this is a great place to start. This book has become a classic in its field, and it gives me a good feeling. I think you'll like it, too. 5 1/2 x 8 1/2 paperback 138 pages - well illustrated

Cat. No. 314

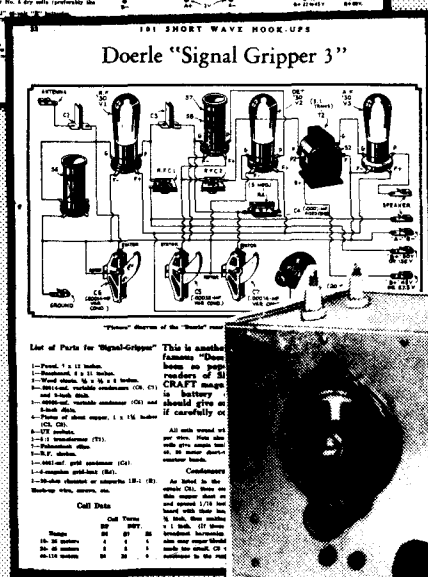
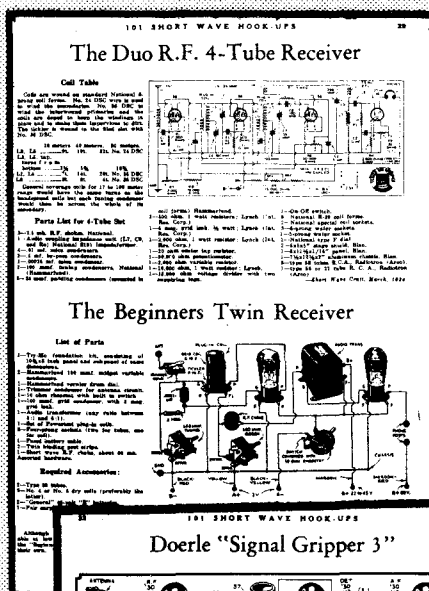
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101 ShortWave Hookups

**Some of the
circuits
you'll find:**

The Mono Coil 2
Ham-Band Pee-Wee 3 Tuber
The Pal 2-Tube Portable
The Electrodyne 1-Tube Set
A Dual Regeneration Control
Set
An Advanced 5-Tube Receiver
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Short-Wave Thrills on 2 Tubes
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The Globe Girdler
Mitchell 7-Tube Superhet
Ultra Seven Portable All Wave
SuperHet
Short-Wave Megadyne
An Improved Super Regenera-
tor
The 53 1-Tube Twinplex
Building a 2-Tube Oscillodyne
A Balanced-Detector Super-
Regenerator
A 5-Tube AC Oscillodyne Set
A 5-Meter Super-Regenerator
A German SW Set
A Symmetrical Input Super-
Regenerator
A 2-Volt 3-Tube Ham Set
5-Meter Transmitter and Re-
ceiver
and much more....



101 Short Wave Hook-Ups
by Short Wave Craft magazine

Somehow I never get tired looking at old radio diagrams. I'm continually amazed at how much performance could be obtained from such a limited amount of relatively primitive equipment. I guess that's why I like this circuit book.

"This book has been prepared in response to many requests for a compilation of short-wave circuit diagrams which have appeared in Short Wave Craft magazine during the past few years. Where ever possible, complete parts lists have been given with the diagrams and, in some cases photographs of the equipment are also included...."

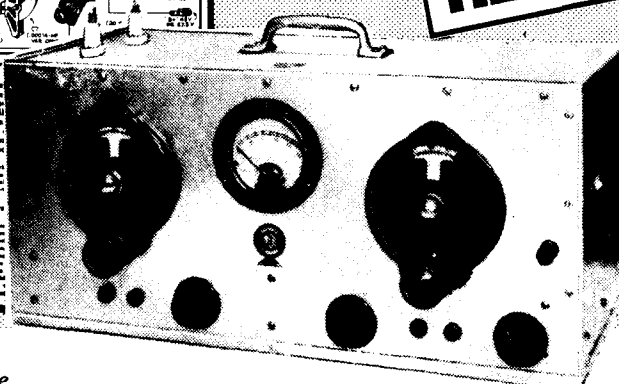
This is one big, fun picture book of radio circuits. It's broken into six broad sections entitled Straight S-W Receivers, S-W Super-

Great Radio Circuits from 1935!

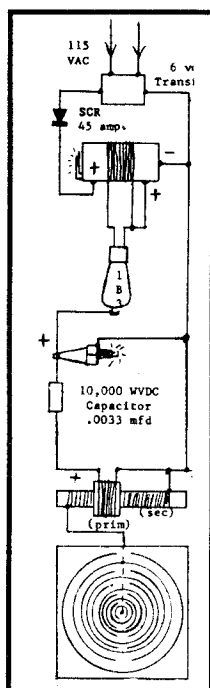
hetrodynes, Super-Regenerative Receivers, AC-DC Receivers, Miscellaneous, and Transmitters. Unless I counted wrong, I totaled up 91 different circuits.

Get a copy of this. You'll like it. It's wall-to-wall fun. A crazy collection of radio circuits from about 1935. Order a copy. 7 1/4 x 9 1/2 paperback 72 pages

Cat. no. 20382 \$7.95



Lakhovsky Multi-Wave Oscillator!



LAKHOVSKY MULTIPLE WAVE OSCILLATOR HANDBOOK

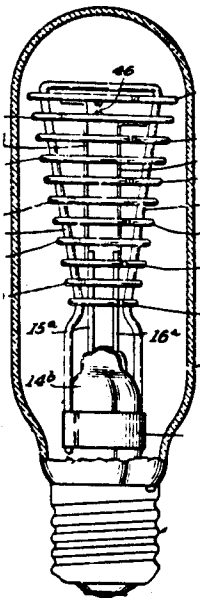
compiled by Thomas
J Brown

Supposedly sometime before World War II, Russian experimenter Lakhovsky asked Nikola Tesla to help him design a high voltage generator that could produce electrical energy at many different frequencies simultaneously. A model of the machine was tested by physicians of the time who found that it not only had a 98% cure rate for terminal cancer, arthritis, and other "hopeless" diseases, but that it could rejuvenate plants and animals as well.

No doubt the oscillator works and is an interesting piece of equipment, but I wouldn't stake my health or anyone else's on it. Quack medicine machines were everywhere in the 1920's & 30's. This could well be another.

In this typewritten report you get historical details, wiring diagrams, construction tips, articles on waves that heal, "documented" cases of cure, reprints of the Lakhovsky patents, and a series of reprinted magazine articles on the use of radio frequency waves to cure disease.

Modern physicians have found that electrical fields can speed healing of wounds in some instances. Perhaps this material has some merit, or perhaps it's all a hoax. Maybe it's another suppressed invention. You figure it out. You'll find it interesting reading — a very unusual collection of material. Get a copy. 8 1/2 x 11 spiral bound 156 pages
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levitation, simple motors, lamp dimmer, and more.

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No. 4 ALL ABOUT AERIALS

Part one covers receiving antennas with notes on tuned antennas, broadcast antennas, low impedance transmission line, doublets for shortwave, transposed leadin, a SW antenna tuner, antenna construction, a double-doublet all-wave antenna, doublet installations and more. Part II covers transmitting antennas for amateur stations including the half-wave antenna, output matching circuits, construction, the Zepp, a counterpoise system, and more.
Cat. no. 823 \$2.25

Gernsback's Educational Library reprinted by Lindsay Publications

In the late 1930's Hugo Gernsback's Radio Publications company in New York published a series of ten shortwave radio booklets to satisfy the public's growing interest in building and operating shortwave sets.

Each booklet is 32 pages in length, is well illustrated, and has a brilliant yellow cover. Each covers a different topic from radio construction to electrical experiments to television.

You'll find these little booklets fascinating reading, full of ideas, and you'll find each to be a slice of early radio history back when radios were built on breadboards with handtools instead of printed circuits.

The original booklets were printed during the Great Depression on inferior quality paper and are now quite rare. But you can get high quality copies on quality paper and enjoy them again.

Order a set today!

No. 1 How to Build 4 DOERLE SHORTWAVE SETS

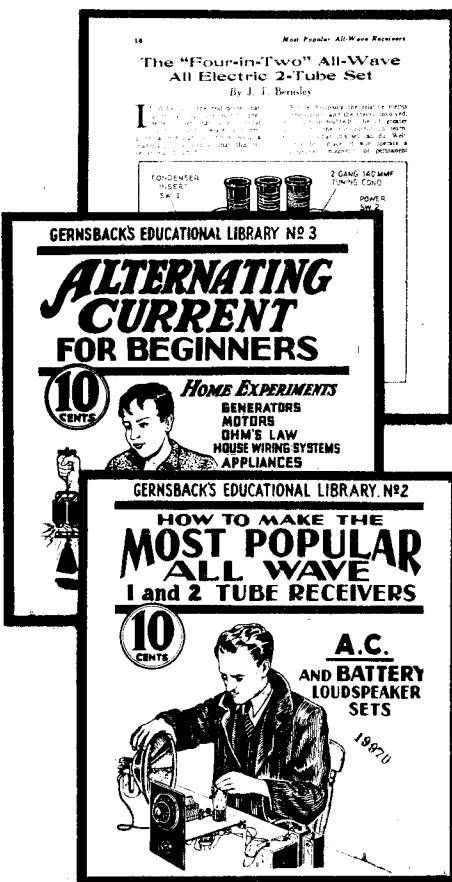
Build the 2-tube 12,500 mil "Doerle" shortwave receiver and the 3-tube signal gripper. You then get instructions on modifying these two basic radios into a bandsread receiver and an 110 VAC operated version.
Cat. no. 820 \$2.25

No. 2 How to Make Most Popular All Wave 1 and 2 TUBE RECEIVERS

Build a Megadyne one-tube loudspeaker set, a beginner's 1 tube AC-DC set, a four-in-two all-wave all electric 2-tube set, a super-regenerative single-tube loudspeaker set, a portable 2-tube battery loudspeaker receiver, and a beginner's one-tube all-wave battery set.
Cat. no. 821 \$2.25

No. 3 ALTERNATING CURRENT FOR BEGINNERS

Study theory, and perform home experiments with AC such as lighting a lamp induction, making a simple electric horn, watch demagnetizer, simple test for motor armature defects, bell-ringing transformer, charging storage batteries from an AC source, simple test for condensers, AC electromagnets, magnetic



No. 5 BEGINNERS' RADIO DICTIONARY

A complete 32 page dictionary for beginners. Obviously, most the terms are still in use, but some are not. Brief definitions and a number of illustrations are provided. Learn about acceptors, counterpoise, ferromagnetic modulation, interrupter, keying flicker, strays, water rheostat and much more.
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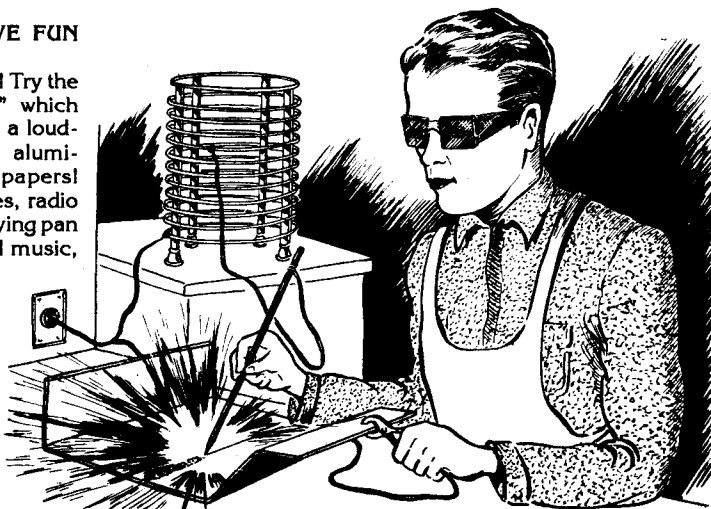
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Gernsback's **SHORTWAVE LIBRARY VOL. 6-10**

No. 6 How to HAVE FUN WITH RADIO

Unusual experiments! Try the "Talking Newspaper" which is nothing more than a loud-speaker made from aluminum foil and newspapers! Also try talking gloves, radio electric chair (put a frying pan in your pants), visual music, dancing to silent music, musical and talking gadgets, the radio dancer, home broadcasting, the door that talked, and more!

Cat. no. 825 \$2.25



No. 7 How to READ RADIO DIAGRAMS

Learn how to translate radio diagrams into physical equipment. You get pictures, definitions, and equivalent symbols of radio components. Then you'll see circuit diagrams for a variety of circuits from crystal sets to multi-tube radios as well as the physical layout they represent. Basic information, but essential to radio newcomers in 1938.

Cat. no. 826

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No. 8 RADIO FOR BEGINNERS

Learn about wave analogies, principles of transmitting, and receiving principles. A lengthy section on receiving instruments will show you how tank circuits tune to particular wavelengths and how tubes and other components perform their jobs. You also get a section

net, on rheostats and how to use them, rectifiers, simple measuring instruments, heat or cold from junction of dissimilar metals, handy wire gauge, musical instruments, and more.

Cat. no. 828

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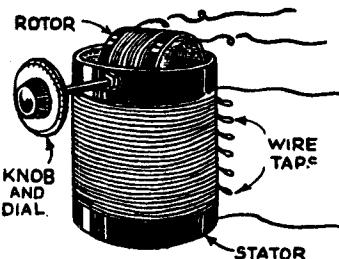


No. 10 TELEVISION

In 1938 this was high-tech electronics! You get a primer of television, including details on mirror scanning, Scophony system, and movies for television. Study the kinescope or cathode ray tube and how the sweeping beam is synchronized. Learn about receiver antennas, how TV programs are broadcast, network TV, and even a Scophony system for color television! Quite interesting.

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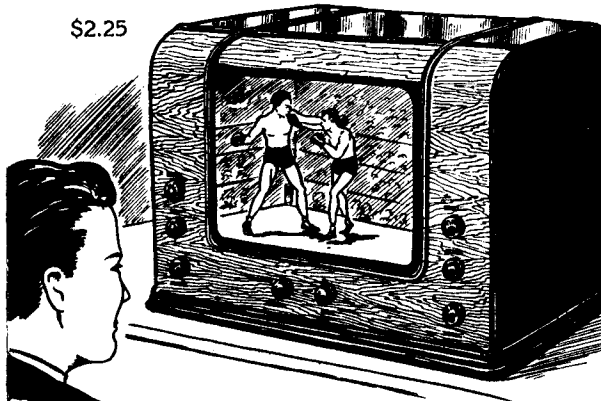
on antennas and aeriels. Another essential booklet for the beginner.

Cat. no. 827

\$2.25

No. 9 SIMPLE ELECTRICAL EXPERIMENTS

Build a galvanometer, experimental magnet, simple motor, electric shocker, microphone, arc lamp, electric furnace, arc welder, a home-made key, batteryless flashlight and more. Perform tricks with telephone receivers and experiments with lamps, neon lamps, condensers, talking condensers, static electricity, and more. You'll find a brief section on making a mag-



PACKAGE Numbers 6 through 10

Get all five for one low price. Save \$1.30.

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Unusual Science Beliefs Attacked...

MARTIN GARDNER

Fads & Fallacies IN THE NAME OF SCIENCE

THE CURIOUS THEORIES OF MODERN PSEUDOSCIENTISTS AND THE STRANGE, AMUSING AND ALARMING CULTS THAT SURROUND THEM
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WILHELM REICH	DR. W. H. BATES	ALFRED KORYZBSKI
ATLANTIS	EGGENTRIC SEXUAL THEORIES	BRIDEY MURPHY

FADS & FALLACIES

In the Name of Science

by Martin Gardner

If you find "Fringe Science" impossible to believe, you'll find this book right down your alley. Gardner presents his views on "the curious theories of modern pseudoscientists and the strange, amusing and alarming cults that surround them. A study in human gullibility."

Gardner tears apart Symmes and his hollow earth theory, Velikovsky and wandering planets, the multiple moon theories of Horbiger & Bellamy, Charles Fort and the Fortean society, dowsing and other strange methods of finding natural resources, naturopathy, iridagnosis, zone therapy, food fads, orgone sex energy by William Reich, L. Ron Hubbard and dianetics, Koryzbski and his General Semantics, Atlantis, flying saucers, and Bridey Murphy.

Gardner shoots them down, and many of them deserve it. But whether you agree with Gardner or not is immaterial. Here, you'll read about many strange ideas for the first time. You can read Gardner's point of view and then do your own research and decide whether you want to agree with him. What I especially like is the appendix that lists many unusual articles and books along with fascinating footnotes.

In other words, Gardner may attack something you really believe in, but in doing so might very well provide you with new directions for your own investigations.

No matter what side of the fence you're on, you'll enjoy this. Wall-to-wall unusual material. A lot of interesting book for the money. You can't afford NOT to have a copy. 5 1/2 x 8 1/2 paperback 363 pages

Cat. no. 737

\$5.95

Video Scrambling Secrets!

VIDEO SCRAMBLING & DE-SCRAMBLING

for Satellite & Cable TV

by Graf & Sheets

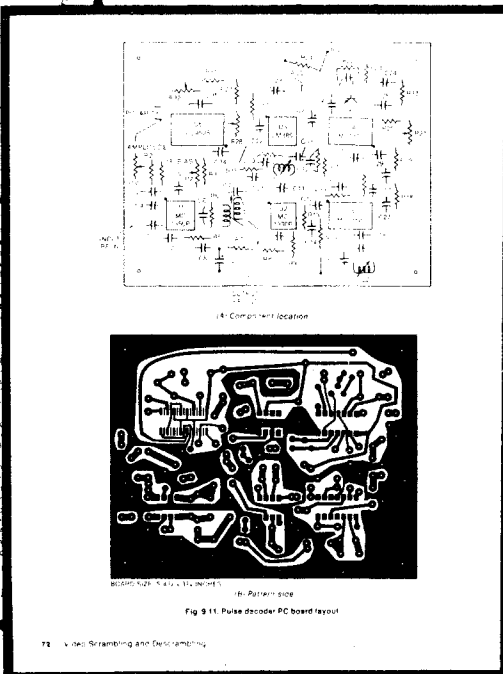
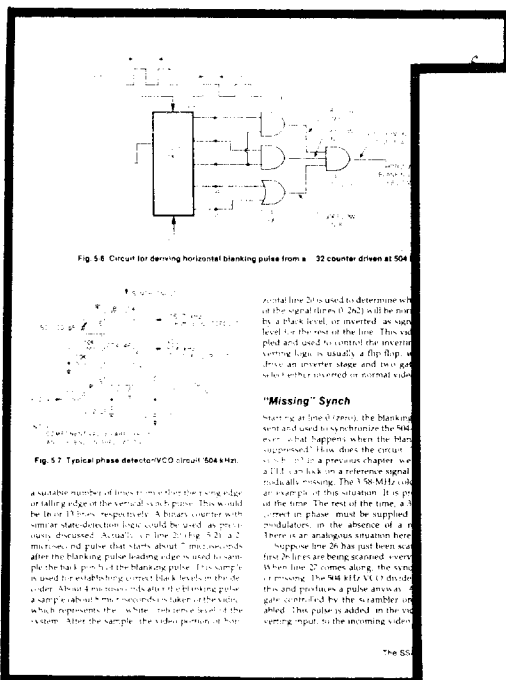
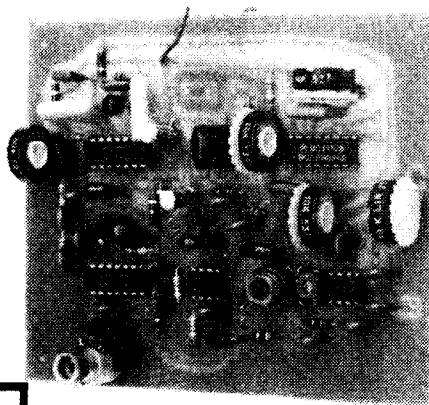
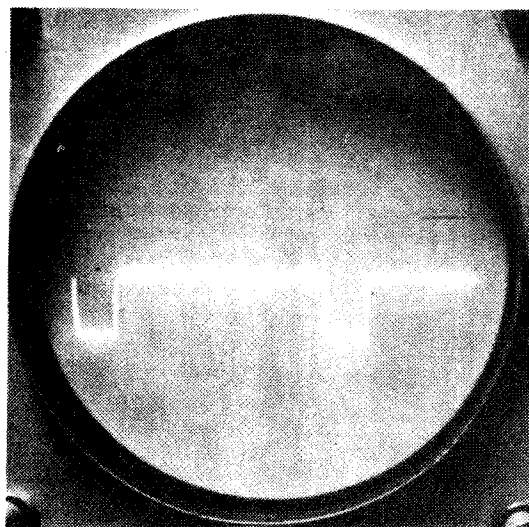
If you have purchased or plan to purchase a satellite dish to capture signals coming from the many Earth-orbiting satellites, this book is for you.

You get:

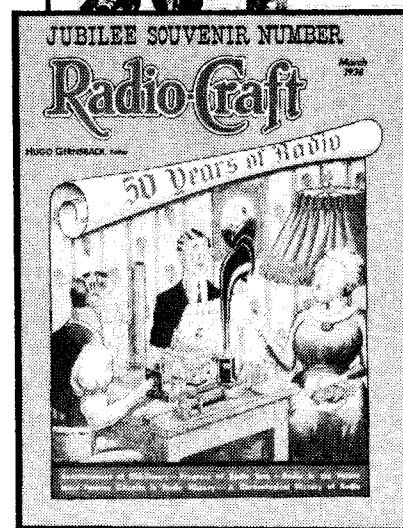
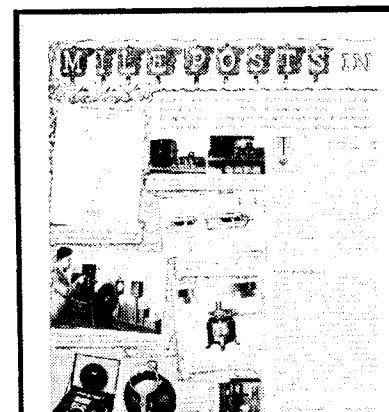
- An understanding of encoding/decoding systems
- The theory and techniques of video encryption and decryption
- An overview of the rules and regulations governing the availability and use of satellite signals, antennas, and programming materials
- Schematics and details for several encoder and decoder projects.

Originally published in 1987, this book provides detailed information on everything from simple cable encryption systems to commercial satellite systems such as VideoCipher II™, the B-Mac System, and even the Data Encryption standard.

Although the authors are quick to point out that the information is not be misused in theft of signal, they have provided a wealth of schematics, printed circuit board layouts, IC chip specs, patent reprints, list of satellites and the scrambling systems they use and much more. This is a quality master reference that any video/satellite fanatic will find useful. Order a copy today! 8 1/2 x 11 paperback 246 pages Cat. no. 370 \$19.95



Amazing "Radio Craft" Magazine from 1938



RADIO CRAFT MAGAZINE

March 1938

edited by Hugo Gernsback

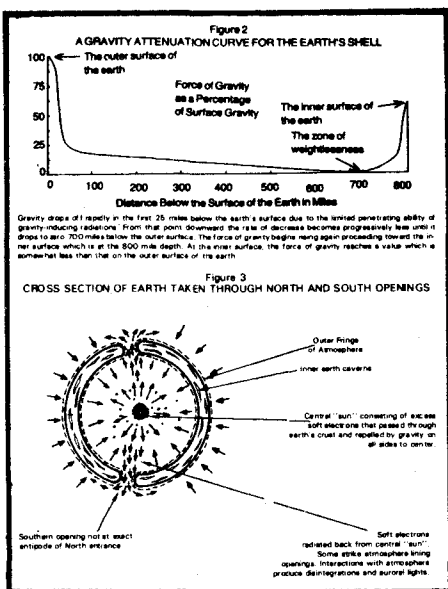
Radio got its start in the 1920's, but it wasn't until the 30's that it made it to the big time. By the late 30's "Radio-Craft" was one of many magazines entertaining and educating radio builders and enthusiasts.

In March 1938 the magazine published a special heavily illustrated edition on radio's first 50 years. And now you can have a complete reprint of that dynamite issue.

Articles include progress of radio receivers, reminiscences of old-timers, story of amateur radio, radio parts of yesteryear, mileposts in television, Fleming's valve, old-time radio stations, new tubes for '37-'38, super-regeneration in 1922, when the neodyne made its bow, early tube experiments and much, much more.

You get every fascinating article, advertisement and how-to construction tip. Great reading for anyone with even a slight interest in oldtime radio. Excellent book. Fun reading. Order a copy! 8 1/2 x 11 paperback 144 pp. Cat. no. 353 \$14.95

Strange New Explanation of the Universe!



THE AWESOME LIFE FORCE

by Joseph H. Cater

The author is one of those people who claims that the government, the pentagon, NASA, the science community and others are suppressing knowledge and telling us lies, and that he alone has solved all of the mysteries. Although I find that hard to believe, some of his arguments are interesting.

Chapters include: undeniable discrepancies in conventional science, cause of tides, the hollow condition of the earth, closer look at the properties of light, popular misconceptions of atomic and particle physics, practical free energy devices, the Searl effect and related UFO phenomema, research of Von Reichenback, pyramid of life, resolving the mystery of teleportation, materializations from higher realms, origin and impetus of disease, and much more.

The author claims that there are holes at the north and south pole that go to the center of the earth. They've been seen and photographed by astronauts but are suppressed by NASA because they can't be explained.

If you believe in this sort of thing, you'll love this book. If you're trained in the sciences, you'll find many of his arguments border on the ridiculous. But regardless of what side of the fence you're on, you WILL find this interesting reading. It's as far out as any book I've seen yet. 5 1/2 x 8 1/2 paperback 475 + pages

Cat.no. 679

\$14.95

Early FAX & TV Equipment!

VISION BY RADIO

Radio Photographs, Radio Photograms

by C. Francis Jenkins

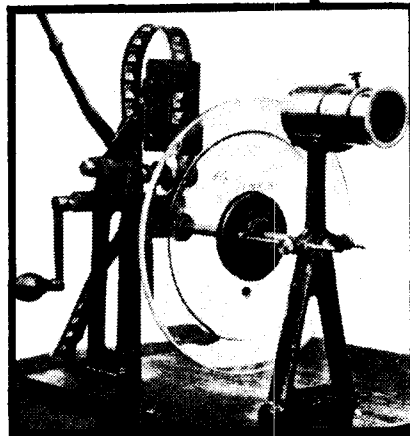
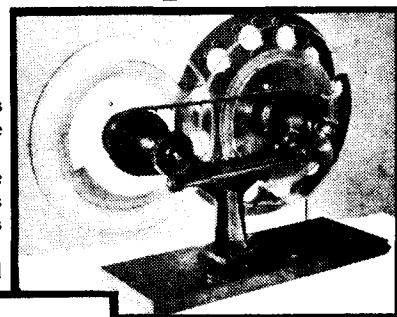
Go back to 1925 and discover the latest devices developed to transmit photographs, in other words, the earliest fax machines and the earliest televisions!

This is an amazing book! You get details on the electrical components that existed at the time, the tests that had been tried, correspondence from famous people, and historical notes.

The most interesting section, I think, is illustrated review of existing machines: Nipkow & Sutton, the Amstutz system, the Electograph,

the Baker machine, the Dr. Korn Machine, the Rignoux and Fournier Scheme, the Belin machine, the AT&T machine, RCA's machine, the Braun Tube receiver, pictures by radio in natural colors (!), prismatic disc machines, the Jenkins prismatic ring, Jenkins synchronizing forks, Jenkins picture-strip machine, Jenkins Duplex machine, talking machine photograms, radio vision (television), Jenkins high speed camera, and more.

Obviously, this book was written and pub-



1925 Television

lished to glorify Jenkins and Jenkins Laboratories Inc (no doubt so he could make more money). But it delivers more photos, drawings, and patents on early fax and TV equipment than I've ever seen anywhere before.

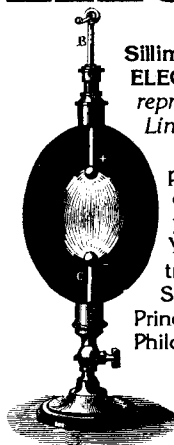
It's really good, and the price we ask is a mere fraction of what you'd pay for

an original if you could find one. Rare informational! Excellent book. Get a copy! 5 1/2 x 8 1/2 paperback 140 pages

Cat. no. 20200

\$9.95

Silliman's ELECTRICAL MACHINES



Silliman's ELECTRICAL MACHINES

reprinted by
Lindsay Publications

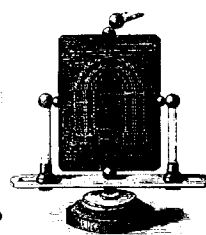
If you'd like to build a powerful lightning bolt generator, this a publication you should study for ideas. You get beautifully illustrated pages from Benjamin

Silliman's book entitled Principles of Physics or Natural Philosophy published in 1865.

Learn about electrophorus, the cylinder electrical machine, Ramsden's plate machine, the

American plate machine, Ritchie's double plate machine, the Tylerian machine, care & management of machines, electricity from steam, and other sources of electrical excitement. Discover seven simple but entertaining experiments. Then investigate equipment to store electricity such as the Aepinus condenser, Volta's condensing electroscope, Dr. Hare's single gold leaf electrometer, the Leyden jar, Leyden jar batteries, the spark, Kinnersley's thermometer, electrical discharge in a vacuum, the diamond jar, scintillating tube and magic squares, chemical experi-

High Voltage equipment from 1865!

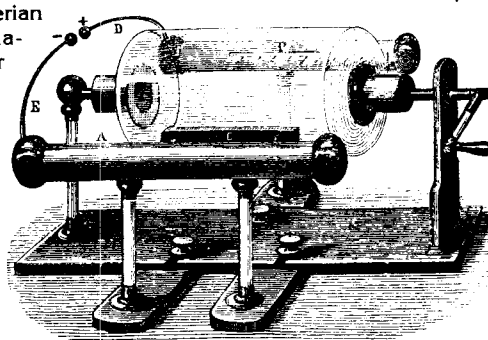


ments, Volta's lamp and more.

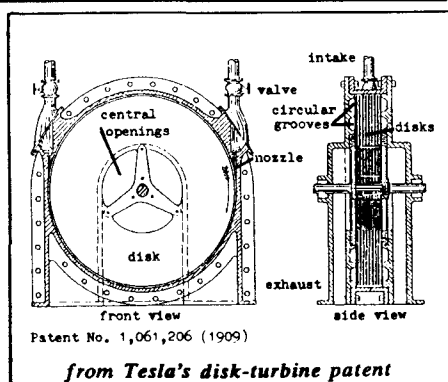
This is another collection of rare static electricity information that is no longer found in modern physics textbooks. And wood cut illustrations like these haven't been produced in decades. Get a copy of these. It will make an excellent addition to your reference library. 5 1/2 x 8 1/2 booklet 24 pages

Cat. no. 840

\$3.25



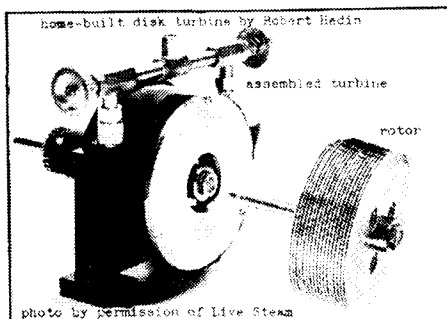
TESLA'S LOST Inventions!



TESLA: The Lost Inventions

by George Trinkaus

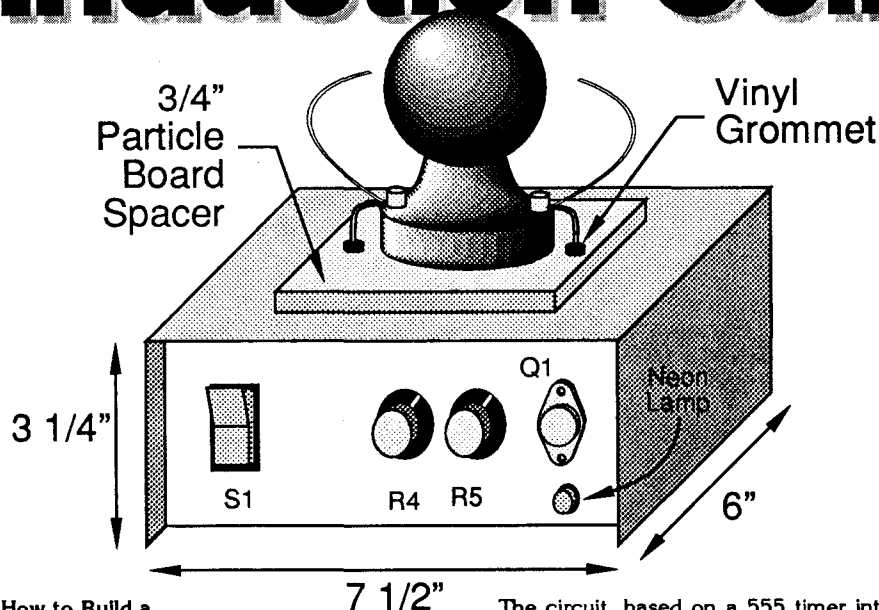
"Here are the suppressed inventions of Nikola Tesla all in one place rendered in clear English and in 42 illustrations. Tesla was famous at the turn of the century for inventing the alternating-current system still in use today. But his later inventions, documented in some 30 U.S. patents between 1890 and 1921, have never been utilized as Tesla intended despite their obvious potential for advancing in fundamental ways the technology of modern civilization. Among these lost inventions: the disk-turbine rotary engine, the tesla-coil electric energy magnifier, high-frequency lighting systems, the magnifying transmitter, wireless power, and the free-energy receiver." —from the front cover.



Like Trinkaus's other Tesla book, the only major criticism that can be leveled here is that the chapters are too short. On the other hand, even if each topic were expanded into a full-blown book, you would probably find Tesla so interesting that your curiosity would still not be satisfied.

Interesting, unusual information, especially if you're just beginning your study of Tesla. Fairly priced. 8 1/2 x 7 booklet 34 pages Cat. no. 748 \$5.95

How to Build a 40,000 Volt Induction Coil



How to Build a 40,000 VOLT INDUCTION COIL

by Walt Noon

Are you looking for a fast and simple way to generate high voltage? Then you should build this nifty little device. All of the parts should be available in your area, and depending how much experience you have building electronic equipment, you should be able to bolt it together in a few hours.

As you already know, the ignition coil in your automobile is the modern equivalent of an old time induction coil. It is nothing more than a transformer that converts low voltage into very high voltage. The points in your automobile replace the old fashioned spark gap. Every time the points open, a pulse of DC current hits the coil like a hammer hits a bell. The ignition coil "rings" like a bell and produces a burst of high voltage. If you "hit" the coil fast enough, the ringing seems to be continuous.

Walt Noon's circuit here replaces the spark gap and the points with a low cost solid state circuit. The circuit takes 110 VAC out of your wall and converts it into a string of DC pulses. The pulses are sent to the terminals of an ignition coil that you can purchase at your local discount store. Off the high voltage terminal comes a solid 40,000 volts that can be used for a variety of experiments including plasma globes and Kirlian photography.

The circuit, based on a 555 timer integrated circuit, provides pulses with adjustable power and frequency. This allows you to easily tune the pulses to the natural resonant frequency of the coil which will significantly increase the output voltage.

You get drawings of the unit, parts list, circuit diagram, photos and assembly instructions for the coil. You are expected to have at least some experience building modern electronic equipment with perf board. You get hints, tips and suggestions on where and how to make circuit modifications.

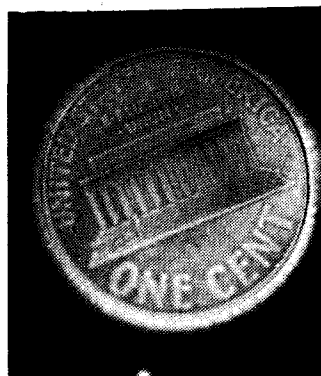
Probably best of all, Walt includes eight different experiments plus extensive details on Kirlian photography. He'll show you how to modify an inexpensive 35mm camera to take these unusual photographs in color and black and white. You also get six Kirlian photographs taken with the equipment he shows you how to build.

If you want to try your hand at high voltage experiments, this might be just the

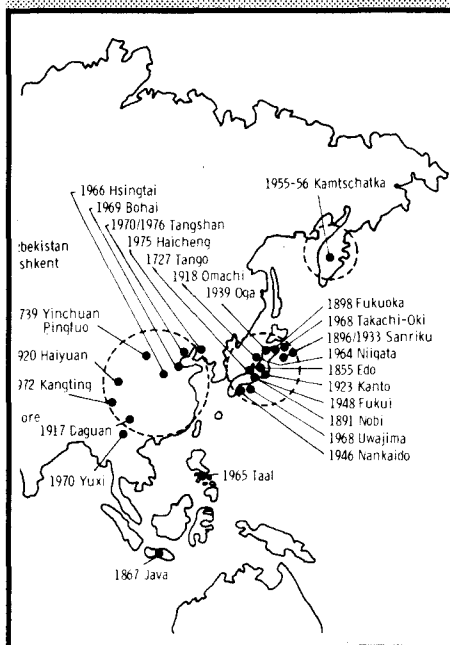
way for you to "cut your teeth", and it's something you'll be proud to show your friends. And it's a good way to literally shock the pants off them! Get a copy of this. It's unusual. It's well written. And it's inexpensive. You'll like it. 5 1/2 x 8 1/2 booklet 24 pages

Cat. no. 844

\$4.95



WHEN SNAKES AWAKE!



WHEN THE SNAKES AWAKE Animals & Earthquake Prediction by Helmut Tributsch

From the back cover: "Two days before an earthquake struck Helice, Greece, in 373 BC, snakes, weasels, and worms deserted the city. Minutes before the Naples quake of 1805, oxen, sheep, dogs, and geese cried out in unison. A herd of horses tore loose and ran off in panic just prior to the San Francisco earthquake of 1906.

Helmut Tributsch, Professor of Physical Chemistry at the Free University of Berlin, visited his native village of Friuli shortly after it had been devastated by an earthquake in 1976. He was intrigued by the stories told by his old friends about their animals' strange behavior in the hours before the quake. This experience started Tributsch on a search through ancient and modern literature for stories relating animal behavior and the appearance of such phenomena as luminosity, clouded springs, and strange fogs to the onset of earthquakes. This book summarizes his findings and presents a plausible explanation for them. Tributsch urges Western scientists to follow the lead of their Chinese colleagues and learn to use these signs as a possible key to the prediction of natural disasters."

This is really an interesting book published by MIT covering 78 earthquakes from 373 BC to 1979 and the unusual phenomena that accompanied them. Not only is it interesting reading, but researches into the fringes of science will find the tables in the appendices quite useful.

Unusual. Reliable. I think you'll like it. 6x9 paperback 248 pages
Cat. no. 752 \$9.95

HIGH FREQUENCY APPARATUS

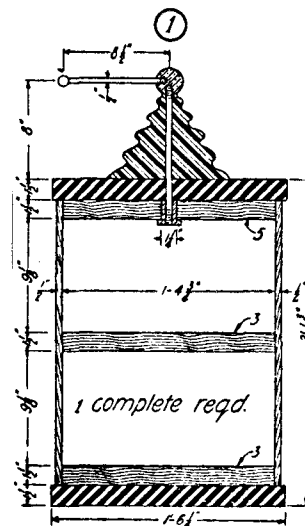
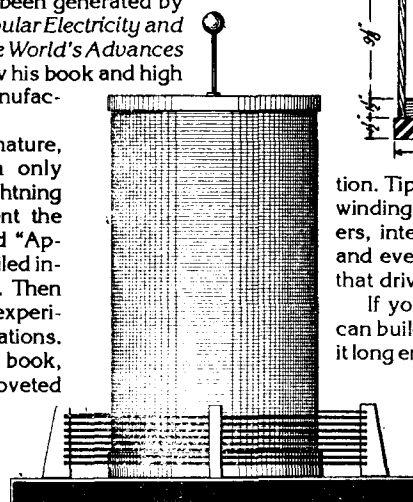
Classic High Voltage
Text is Back
in Print!

High Frequency Apparatus
by Thomas Stanley Curtis
reprinted by Lindsay Publications

By 1916 so much interest in induction, Tesla and Oudin coils had been generated by *Electrician & Mechanic*, *Popular Electricity* and *Modern Mechanics*, and *The World's Advances* magazines, that Curtis knew his book and high voltage equipment he manufactured would be a hit.

Because of their very nature, magazines could publish only brief articles on these lightning bolt generators. Curtis went the other extreme, and packed "Apparatus" with as much detailed information as he could find. Then he added suggestions for experiments and dozens of illustrations. The result is now a classic book, and original copies are so coveted that they're difficult to find.

You get wall-to-wall how-to on coil construc-



tion. Tips on calculating windings, winding coils, making transformers, interrupters and spark gaps, and even the power transformers that drive the spark gap.

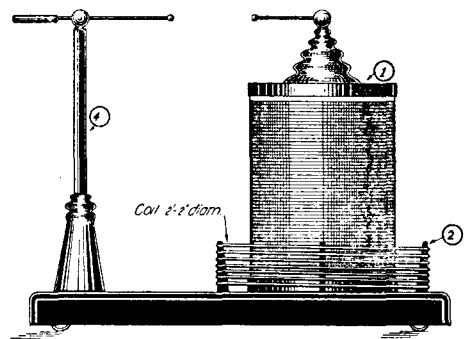
If you want to die young, you can build an X-ray apparatus. Use it long enough, and you and every-

one in your apartment building will glow in the dark!

Build a grid and see for yourself if high frequency current really

does affect plant growth. Build yourself a large coil that produces 50" lightning bolts, give lectures, and make people think you are a genuine made scientist. (Bring your mother-in-law along. They might mistake her for Frankenstein....)

Great book. And absolutely **MUST HAVE** book for the Tesla coil experimenters. Get a copy for your high-voltage library. Quality. Order a copy today. 5 1/2 x 8 1/2 paper 247 pages well illustrated
Cat. no. 20030 \$11.95

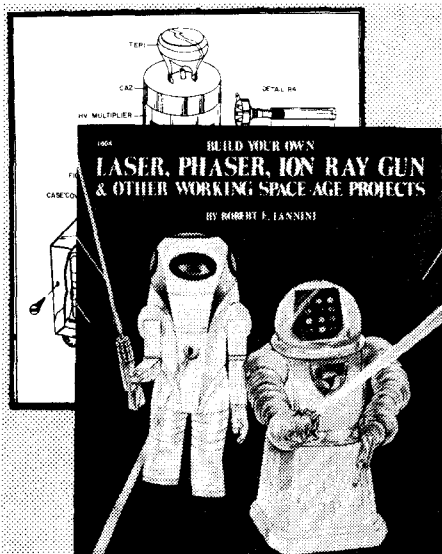


Special Hardcover Edition

A fraction of the print run has been hard-bound with quality materials for the serious student and collector. This edition may be unavailable for long periods of time.
Cat. no. 20048 \$18.95

Contents

- 1 Alternating Current at Low and High Frequencies
- 2 How the High Frequency Current is Produced
- 3 The High Potential Transformer or Induction Coil
- 4 The Oscillation Transformer
- 5 The Spark Gap
- 6 Oscillation Transformers
- 7 Induction Coil Outfits Operated on Battery Current
- 8 Kicking Coil Apparatus
- 9 One-Half Killowatt Transformer Outfit
- 10 Quenched Gap Apparatus
- 11 Physicians' Portable Apparatus
- 12 Physicians' Office Equipment
- 13 Hot Wire Meter Construction
- 14 Notes for the Beginner in Electro-Therapeutics
- 15 Plant Culture with High Tension Current
- 16 High Frequency Plant Culture
- 17 A Foreword on the Construction of Electrical Apparatus for the Stage
- 18 Construction of Large High Frequency Apparatus
- 19 Large Tesla and Oudin Coils for the Stage
- 20 Construction of a Welding Transformer
- 21 Hints for the Electrical Entertainer
- Appendix Parts and Materials - How Much They Cost and Where to Get Them



Strange Electronics Plans!

BUILD YOUR OWN LASER, PHASER, ION RAY GUN. . .

by Robert E. Lannini

Here's one of the most bizarre collections of how-to plans I have ever seen. You'll learn how to build high-power pulsed red ruby laser

- beginner's simulated laser
- visible red laser
- pulsed laser rifle
- ruby laser gun
- CO2 laser
- laser light detector
- plain field generator
- phaser shock-wave pistol
- ultrasonic generator
- ultrasonic listening device
- 250 kv Tesla Coil
- ion ray gun
- magnetic field distortion detector
- light-beam communicator
- solid-state Tesla coil
- infrared viewer
- FM voice transmitter
- long-range telephone xmtr
- parabolic microphone
- paralyzing device
- wireless repeater xmtr
- much, much more!

gun, high-power continuous IR CO2 Laser, ultrasonic field generator, programmable high-power ultrasonic generator, 250,000 volt Tesla coil, magnetic field distortion detector, solid-state Tesla coil, a variety of wireless "bugs", a super-sensitive parabolic microphone, electronic paralyzing device, battery charger and eliminator and much more.

Lannini is an experienced electronics inventor, and holds many patents. He'll give you parts lists, wiring diagrams, assembly diagrams and all you need to get these projects built. I don't think that

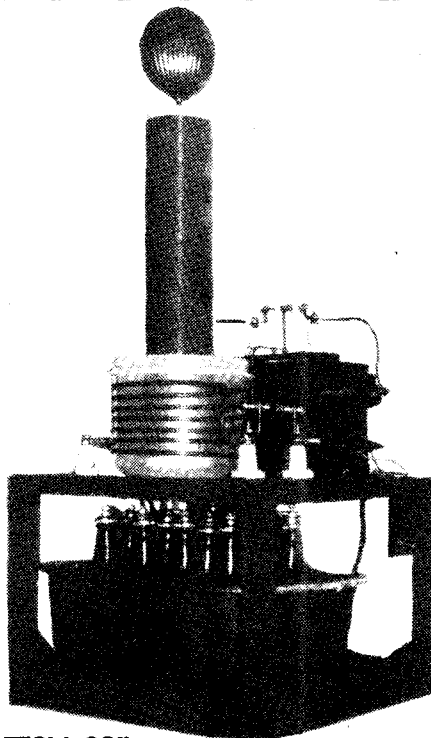
it's any coincidence that almost every plan has a footnote telling you that kits are available from Information Unlimited, Inc., which is owned by the author and which advertises in the back of the science and mechanics magazines. No doubt, that firm's best selling plans have been reprinted in this single volume.

This book is expensive, but it delivers. I really like this, and I'm sure you will too. Order a copy, even if it has to sit for two years on the shelf before you get ready to build. Excellent book. 8 x 9 1/2 paperback 390 pages.

Cat. No. 346

\$17.60

Build a TESLA COIL!



TESLA COIL

by George Trinkaus

Here's another Tesla coil book. It's a bit expensive for what you get, and much of it is a repeat, but there are some bits and pieces that I haven't seen.

You get a brief overview of Tesla, his career and his coil. Then you get instructions on building a good sized coil using a neon transformer and a spark gap to drive the primary. The detail is not great but is probably adequate.

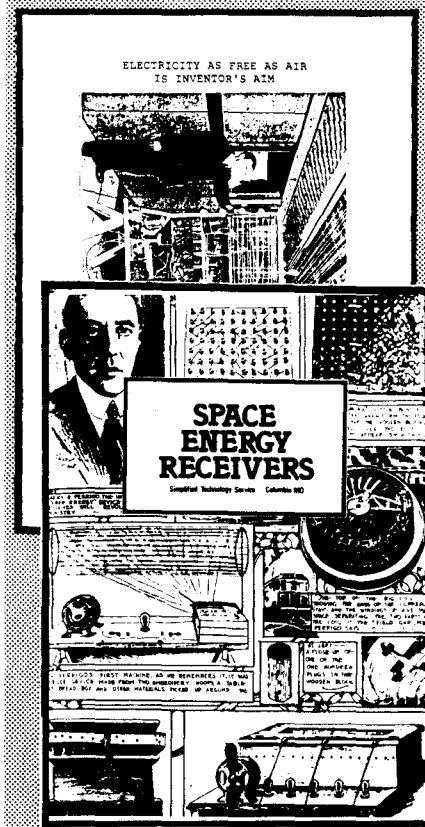
You get brief discussions and details on capacitors, glass-and-foil capacitors, oil capacitors, salt-water capacitors, series and rotary spark gaps, a schematic for a 6L6 vacuum tube driven coil, construction notes, hazards, Tesla lighting, ozone disinfectant, and magnifying transmitter. All this in 21 pages!

Obviously, the booklet does not go into great detail, but there are ideas and clues here that you might not have thought of yet that might be worth the price and then some. You'll have to decide. Consider it carefully. 7 x 8 1/2 booklet 21 pages

Cat. no. 741

\$4.95

Space Energy RECEIVERS



SPACE ENERGY RECEIVERS

by Simplified Technology Service

"Space energy receivers... may be defined as a class of devices which apparently collect electrical energy from the surrounding space without applied force, by some process other than chemical or mechanical action..."

What? Pull energy out of thin air? That's what they claim. Do they work? At least a few were built to defraud gullible investors. BUT! There *IS* energy out there, and extracting it would be comparable to geothermal power. You're not creating energy, just tapping existing reserves.

Do the machines described here really work? Maybe. Maybe not. Whether you believe they do or not is of little importance because either way you'll find this interesting reading. You'll enjoy the photos, diagrams, and claims.

You'll learn about Tesla's patent, the Moray unit, the Yglesias machine, the Gustav Weise receiver, the Meyers machine, Hartwig's pendulum observations, Perrigo's fantastic machine seen in Congress, the Mushroom generator, and excerpts from a formerly classified British report on a world War II German machine, that is now declassified.

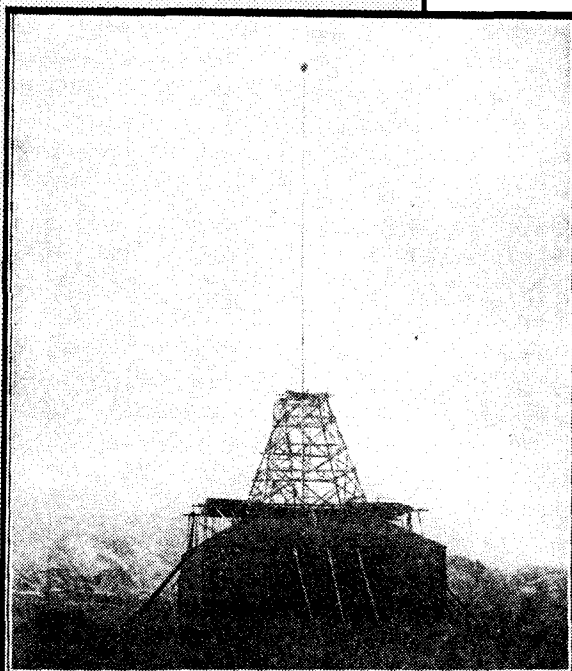
In addition, you get reference books to read, a list of experimenters, and other tidbits. It's quite interesting, and if there is one complaint I have, it's that "Receivers" is just not long enough. I think you'll like it. Very unusual! Order a copy. 8 1/2 x 11 booklet, 21 pages.

Cat. No. 882

\$4.50

Tesla's Experiments with Alternate Currents!

Power transmission without wires: the London Lecture plus a 1904 magazine article on the Colorado Springs experiments! Rare book!



Experimental Laboratory, Colorado Springs.

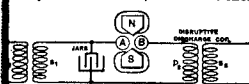
EXPERIMENTS WITH ALTERNATE CURRENTS of High Potential & High Frequency by Nikola Tesla

"A lecture delivered before the institution of electrical engineers, London, by Nikola Tesla with an appendix by the same author on the transmission of electric energy without wire, reviewing his recent work, and presenting illustrations from the photographs never before published".

Quite a title! Quite a book! There's so much written and published about Tesla (and too much of it is pure garbage), that it is refreshing to have the inventor himself explain his experiments, theories, and plans. It's all here, every page from the original 1904 book — complete with unusual illustrations showing disruptive discharge coils, improved discharger and magnet, luminous discs, single wire and no wire motor, unusual electric lights for use with the high-frequency AC that is generated by the Tesla coil, and much more.

The last fourteen pages of the book is a reprint of Tesla's article from the March 5, 1904 issue of "Electrical World and Engineer" complete with photographs of the experimental apparatus at Colorado Springs and Long Island built to test the transmission of electrical power without wires.

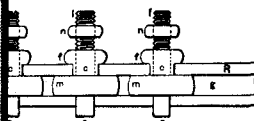
section indicated diagrammatically in Fig. 5, the currents forming the arc are much more the magnetic field exercises a greater influence of the magnet permits, however, of the discharge by a vacuum tube, but I have encountered



ALIGNMENT WITH LOW-FREQUENCY ALTERNATE CURRENTS AND IMPROVED DISCHARGES.

Difficulties in working with an exhausted

of discharger used in these and similar experiments indicated in Figs. 6 and 7. It consists of a piece of (Fig. 6), each of which comprises



DISCHARGER WITH MULTIPLE GAPS.

the portion m with an extension e below— used to fasten the piece in a lathe when discharging surface—and a column above, of a knurled flange f surmounted by a carrying a nut n, by means of which a

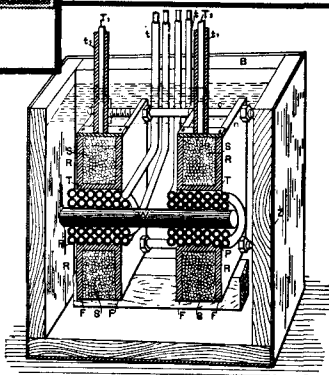


FIG. 3.—DISRUPTIVE DISCHARGE COIL.

coil and other apparatus used in the experiments with the disruptive discharge this evening.

It is contained in a box B (Fig. 8) of thick boards of hard wood, covered on the outside with zinc sheet Z, which is

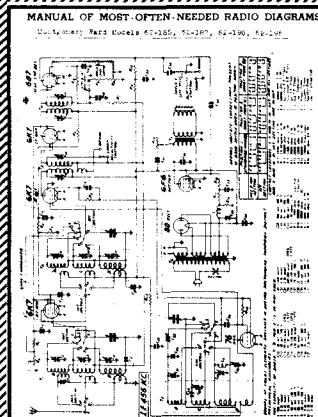
Anyone who studies Tesla, builds his coils, or wants to perfect the inventions that Tesla didn't have time to finish should have a copy of this book. The writings of Tesla himself should be the cornerstone of any Tesla library, and here is your chance to get your own copy of this now-rare book. Interesting reading. Historically important. Get a copy.

5 1/2 x 8 1/2 paperback 170 pages.

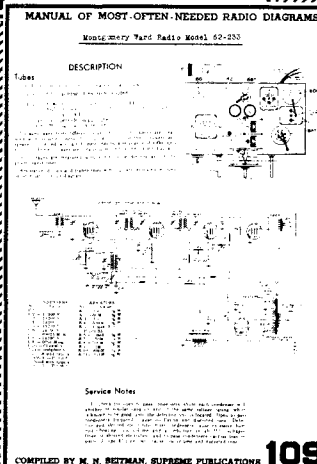
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\$9.95

Old Radio Diagrams!



108



109

Most Often Needed 1926-1938 RADIO DIAGRAMS and Servicing Information compiled by M. N. Beitman

Reprinted from out of the past is this great collection of wiring diagrams and service tips on most of the radios likely to be encountered by a radio serviceman in 1938.

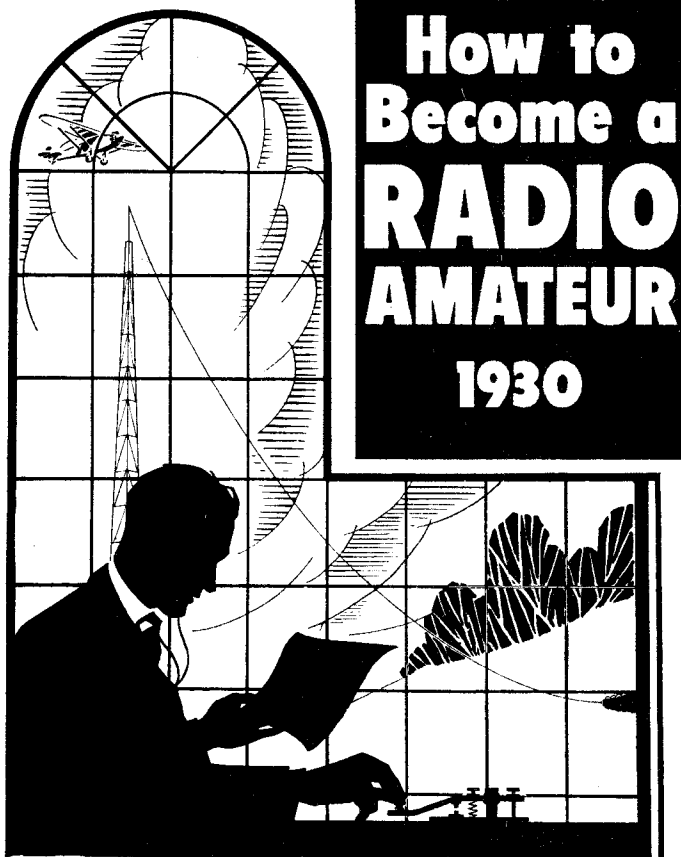
You get not only the circuit diagram but in many cases parts numbers, voltage measurements at critical points, chassis drawings, alignment specs for superheterodynes, and more.

You'll find mostly diagrams for superhets, but there are a few regens from the "old days". Many receivers have shortwave bands. And although I consider myself at least somewhat knowledgeable about old radio technology there are tube numbers used here that I've never even heard of!

If you collect radios or like to build old sets using old parts, this is for you. You'll find everything from Atwater-Kents to Zenith radios listed. A valuable reference. Good stuff. Consider it carefully. 8 1/2 x 11 paperback 240 pages

Cat. no. 362

\$11.95



HOW TO BECOME A RADIO AMATEUR (1930)

by the American Radio Relay League

reprinted by Lindsay Publications

In 1930 thousands of people were not only fascinated by the arrival of broadcast radio, but by the magic long distance communication possible through short-waves. This simple booklet was intended to draft many of those people into the hobby of ham radio.

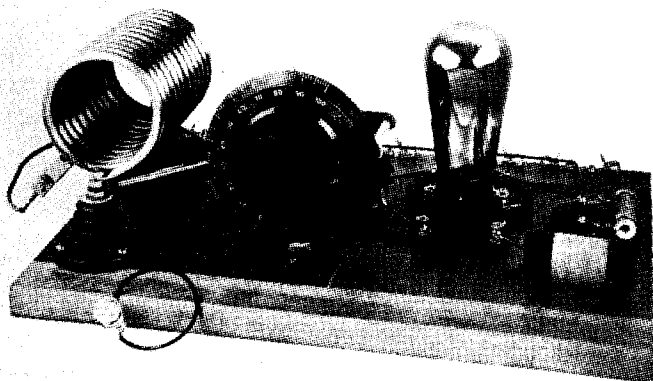
Here you'll discover the amateur bands as they then existed, how to learn Morse code, how to build a two-tube (UV-201-A) bread board regenerative receiver for the 80 meter band, an oscillating transmitter using a UX-210

Build a 1930 Ham Radio Station!

tube, an AC power supply, tips on setting up the radio station, and finally how to operate it.

Not only is this great nostalgia, it is also quite practical should you want to build a copy of the regenerative receiver. You may want to build a copy of the transmitter for display or occasional demonstration, but you probably wouldn't want to use it on the air.

Discover 1930 ham radio. Build early equipment. Lots of fun reading. Low cost. Get a copy. 8 1/2 x 11 booklet — 32 pages Cat. no. 20226 \$2.95



Nikola Tesla Writings

CONTENTS

Part I — Polyphase Currents

- Biographical and Introductory
- A New System of Alternating Current Motors and Transformers
- The Tesla Rotating Magnetic Field — Motors with Closed Conductors — Synchronizing Motors — Rotating Field Transformers
- Modifications and Expansions of the Tesla Polyphase Systems
- Utilizing Familiar Types of Generators of the Continuous Current Type
- Method of Obtaining Desired Speed of Motor or Generator
- Regulating for Rotary Current Motors
- Single Circuit, Self-Starting Synchronizing Motors
- Change from Double Current to Single Current Motors
- Motor with "Current Lag" Artificially Secured
- Another Method of Transformation from a Torque to A Synchronizing Motor
- "Magnetic Lag" Motor
- Method of Obtaining Difference of Phase by Magnetic Shielding
- Type of Tesla Single-Phase Motor
- Motors with Circuits of Different Resistance
- Motor with Equal Magnetic Energies in Field and Armature
- Motors with Coinciding Maxima of Magnetic Effect in Armature and Field
- Motor Based on the Difference of Phase in the Magnetization of the Inner and Outer Parts of an Iron Core
- Another Type of Tesla Induction Motor
- Combinations of Synchronizing Motor and Torque Motor
- Motor with a Condenser in the Armature Circuit
- Motor with Condenser in One of the Field Circuits
- Tesla Polyphase Transformer
- A Constant Current Transformer with Magnetic Shield Between Coils of Primary and Secondary.

Part II — Tesla Effects with High Frequency and High Potential Currents

- Introductory — The Scope of the Tesla Lectures
- The New York Lecture. Experiments with Alternate Currents of Very High Frequency, and Their Application to Methods of Artificial Illumination, May 20, 1891
- The London Lecture. Experiments with Alternate Currents of High Potential and High Frequency, February 3, 1892
- The Philadelphia and St. Louis Lecture. On Light and Other High Frequency Phenomena, February and March, 1893
- Tesla Alternating Current Generators for High Frequency
- Alternate Current Electrostatic Induction Apparatus
- "Massage" with Currents of High Frequency
- Electric Discharge in Vacuum Tubes.

Part III — Miscellaneous Inventions and Writings

- Method of Obtaining Direct from Alternating Currents
- Condensers with Plates in Oil
- Electrolytic Registering Meter
- Thermo-Magnetic Motors and Pyro-Magnetic Generators
- Anti-Sparking Dynamo Brush and Commutator
- Auxiliary Brush Regulation of Direct Current Dynamos
- Improvement in Dynamo and Motor Construction
- Tesla Direct Current Arc Lighting System
- Improvement in Unipolar Generators.

Part IV — Appendix on Early Phase Motors and the Tesla Oscillators

- Mr. Tesla's Personal Exhibit at the World's Fair
- The Tesla Mechanical and Electrical Oscillators.

Inventions, Researches & Writings of NIKOLA TESLA

Inventions, Researches & Writings of
NIKOLA TESLA

by Thomas Commerford Martin
reprinted by Lindsay Publications Inc

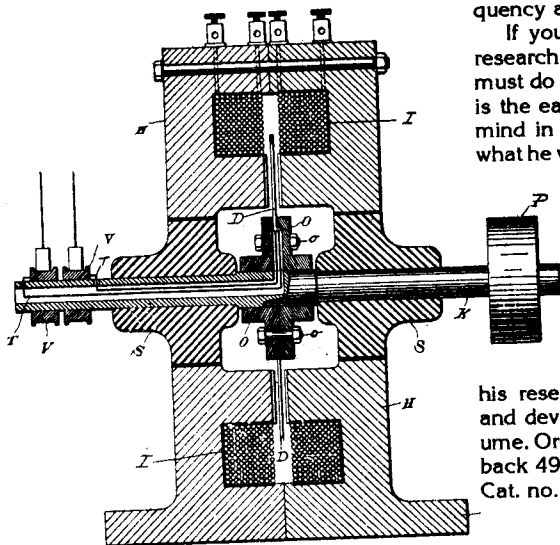
The greatest world's fair ever constructed was underway in Chicago in 1893. More electricity and more electric lights were used in the fair than in the entire city of Chicago. It was the electric age, and Edison was doing with commercial battle with Westinghouse and its star, Nikola Tesla.

In 1893, this volume, a comprehensive collection of Tesla's work to that point, was published. And although it is now quite rare, you can have a high quality reprint for a small fraction of what cost us to obtain an original copy.

Most people think of lightning generators when they think of Tesla, but that's a very narrow perspective. People should think of alternating current. Tesla created the power system used throughout the world today — one that operates at 50 and 60 cycles per second.

Tesla experimented with other frequencies, iron and air core transformers, as well as motors and generators. Tesla didn't just one day decide he was going to build his famous lightning bolt generator. It was but another step in a series of experiments that had begun years before. Here you get a complete record of this research up to 1893.

It's all here — the AC experiments and inventions that lead Tesla to experiment with ever higher voltages and frequencies, the neon



**Rare 1893
Tesla
book now
back in
print! All
Tesla work
to that
date!**

tubes and fluorescent lights, unusual high frequency alternators and even magnet motors.

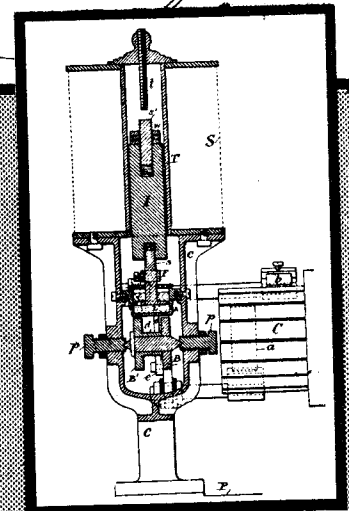
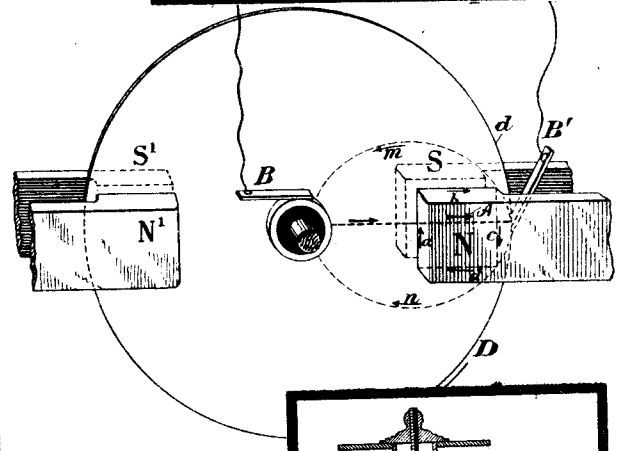
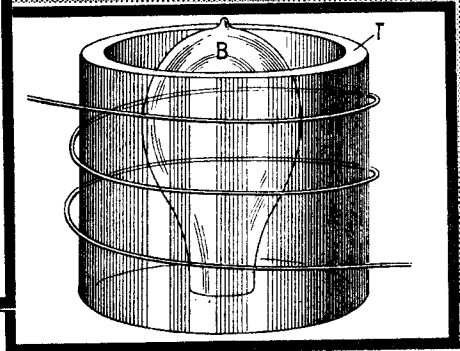
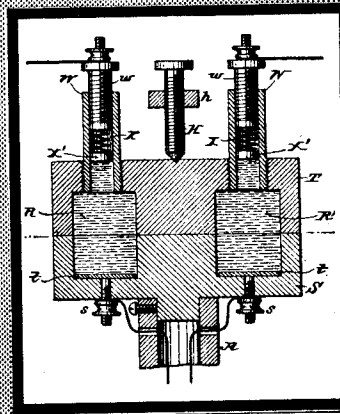
If you want to carry on Tesla's unusual research, you must walk in his footsteps. You must do your homework. Here in one volume is the early work that will help you get your mind in sync with his and perhaps suggest what he was thinking at the time, and give you ideas of where to take his experiments.

Every Tesla fan, every high voltage experimenter, and every electrical engineer should have a copy of this classic book. Just as much as Edison, Tesla created the world in which we live today.

Now you can study the results of his research, attend his special exhibitions, and devour his lectures, with this single volume. Order a copy today! 5 1/2 x 8 1/2 paper-back 496 pages
Cat. no. 4902

\$16.95

**Incredible inventions!
AC Power, High Voltage,
High Frequency,
Oil Condensers,
even magnet motors!**



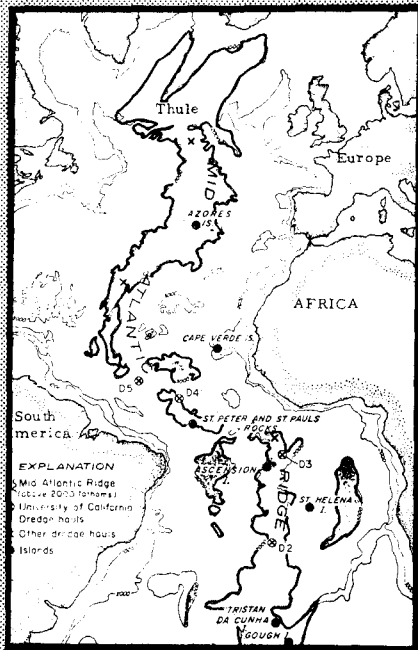
SPECIAL HARDCOVER EDITION

A small fraction of the print run has been beautifully hardcover bound for libraries, serious collectors and researchers. It is possible the hardcover edition may be unavailable for extended periods of time.
Cat. no. 4910

\$26.95

MYSTERIES!

- Mind Control
- Atlantis
- UFO's
- Tesla
- Suppressed Inventions
- much more



ENIGMA FANTASTIQUE

by W. Gordon Allen
copyrighted by Tesla Radiation Inc.

"Why was only a small portion of Dr. Tesla's work permitted to be used by world industry? What were the incredible SECRETS of mind control demonstrated by the life of Nikola Tesla? What do the mind-control secrets of Dr. Tesla and Dr. Rudolf Steiner have in common?..."

This is another of those strange "revealing" books that declare they have all the answers to why certain inventions, ideas and developments are being "suppressed." You can laugh at it, or take it seriously. Your choice.

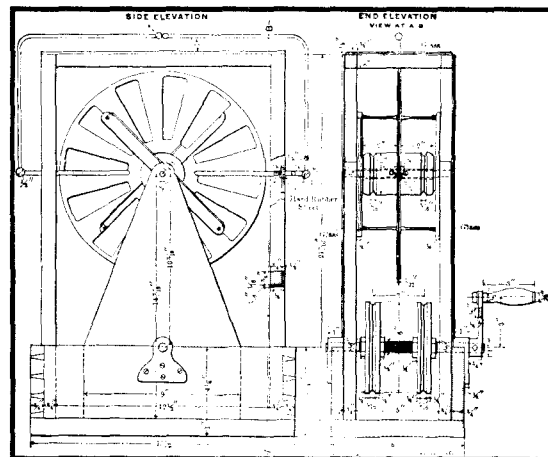
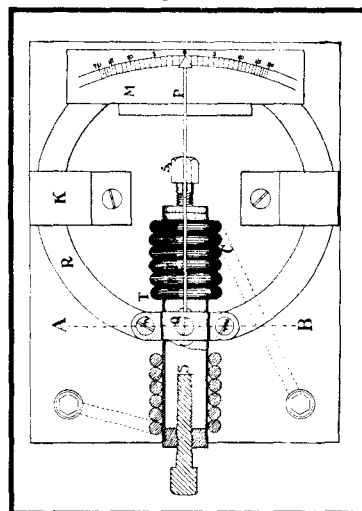
Whatever your point of view, you should find it interesting. You get descriptions of Tesla's ideas of power transfer, Dr. Rudolf Steiner and his strange ideas, Atlantis, UFO's, and a bunch of other things.

Under no circumstances do I endorse any of this. I offer it only as entertainment, science-fiction, if you like. Although that's my opinion, you may be convinced that it's fact. You decide.

Spiral bound, 197 page typewritten book with poorly reproduced photos. 8 1/2 x 11
Cat. No. 724 \$10.00

ELECTRICAL DESIGNS!

34 Projects! From motors to Tesla Coils!



ELECTRICAL DESIGNS

Articles from American Electrician Magazine
reprinted by Lindsay Publications

By 1901 people were getting tired of shocking the cat. They realized that electricity was more than a novelty, and that it could be put to use doing heavy work. But electric motors were scarce and very expensive. It's no wonder that half of the pages in this book are devoted to building and winding motors.

As interesting and useful as motor plans are to some people, the beauty of this volume are the plans in the back half. You'll learn how to build rheostats, reactive coils, ammeters, voltmeters, a simple wattmeter, and a galvanometer.

Build a storage battery, a Bunsen photometer to measure the candlepower of light bulbs, an arc lamp, and a Nemst lamp. Build a telephone, a dry cell, and handy tools for working on motor commutators.

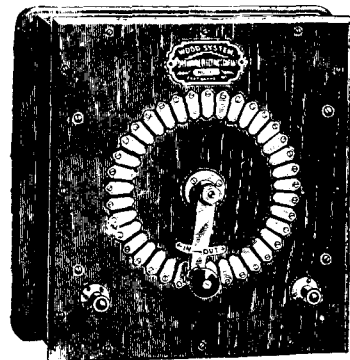
If you're into high voltage, you'll find useful plans for an induction coil, a Tesla-Thompson coil, a high voltage condenser for use with Tesla coils, and a powerful Wimshurst machine.

Every article is illustrated, and most drawings are dimensioned. The text is brief and to the point, but it should provide more than enough information for you to complete the project.

It doesn't matter whether you're interested in collecting ideas for winding modern working motors from the specs and instructions here, or if you're trying to build early exotic test equipment. You'll find something here to interest you.

With plenty of hard work you could probably build an entire electrical system: alternator, transformer, motors, rectifier, storage battery, lamps, telephone without having to buy any commercial parts other than wire! Think about it. Your friends would call you a modern day Thomas Edison!

Great ideas. Unusual plans. Plenty to keep your mind and hands busy. Get a copy of this! It's worth having! Order today. 5 1/2 x 11 paperback 262 pages
Cat. no. 4228 \$11.50



Plans For

- one-sixth horsepower motor with drum armature
- one-sixth horsepower motor with ring armature
- one-fourth horsepower motor with drum armature
- four kilowatt combined AC & DC machine
- single phase rectifier
- universal alternator for laboratory purposes
- one-quarter horsepower induction motor
- simple transformer in four sizes
- construction of a reactive coil
- construction and calculation of rheostats
- simple voltmeters, ammeters, wattmeters
- d'Arsonval galvanometer
- sensitive mirror galvanometer
- Thomson Astatic Galvanometer
- cheap testing set
- construction and use of a photometer
- construction of a simple storage battery
- construction of a constant potential arc lamp
- an experimental Nemst lamp
- construction of an induction coil
- construction of a Tesla-Thompson high frequency coil
- condenser for extremely high potentials
- construction of a Wimshurst influence machine
- telephone transmitter and receiver
- construction of a dry battery cell
- some handy commutator tool
- and more!

Tesla Coil Secrets!

TESLA COIL SECRETS

by R. A. Ford

Be the first on your block to blast your neighborhood with high voltage! Shock the socks off your friends and relatives! Zap those pesky cats digging in the garbage can! Make people think you really are building a Frankenstein monster in your basement!

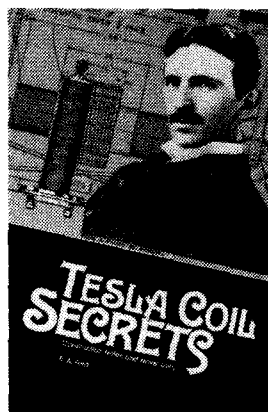
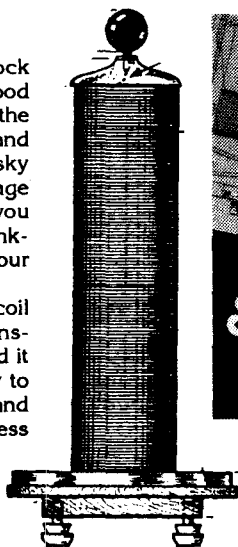
As you know, a Tesla coil is a high voltage transformer. Nikola Tesla used it at the turn of the century to generate lightning bolts and to investigate the wireless transmission of electrical power.

This fascinating book is not really a how-to-build book. Actually, an avid researcher who has built several coils and has accumulated articles, clippings, notes, and bits-and-pieces over the years has opened up his scrapbooks to us.

You'll see all the interesting hints, plans, and wiring diagrams gleaned from early magazines that ceased publication decades ago along with formulas, notes, and observations he believes are important for building powerful coils. Many of the old articles are so detailed that you can probably use them to build a powerful experimental coil. There are notes on one machine the could kick out five foot lightning bolts!

If you're really into Tesla coils, you may have seen a few of these clippings already. But I'll bet there are others you haven't seen. You'll get info on rotary spark gaps, anti-kick-back devices, Leyden jar capacitor construction, conical Tesla coils, Oudin coils, and suggestions on research into wireless power transmission, plant growth stimulation, medical uses, and more.

Many of the reprinted articles are fuzzy and a few hard to read. Most have been enlarged to bring out the construction details, and have been

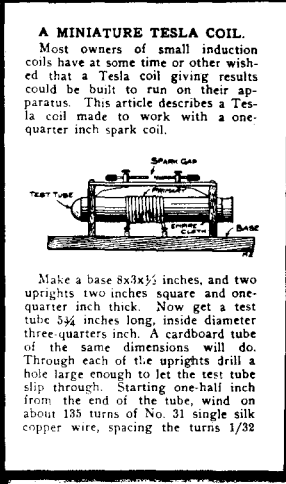
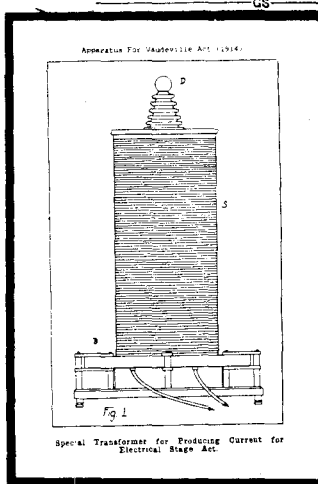
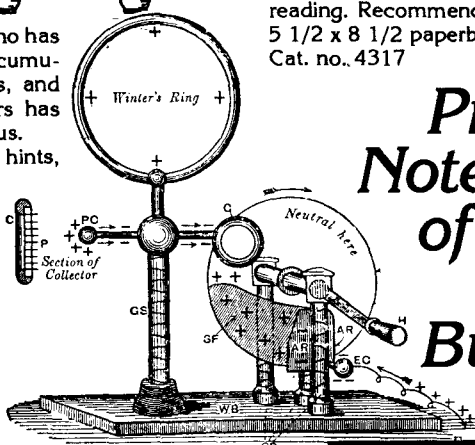


Tesla didn't have time to pursue or reveal.

Rare info! Too bad the book isn't ten times bigger. Get a copy for the reference library if for no other reason. Interesting reading. Recommended!

5 1/2 x 8 1/2 paperback 74 pages
Cat. no. 4317 \$6.95

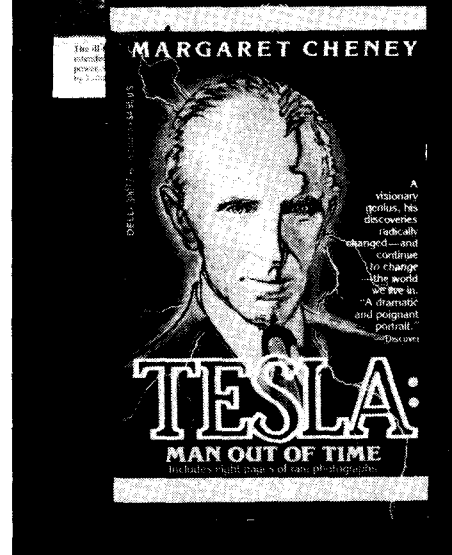
Private Notebook of Tesla Coil Builder



reprinted in their entirety. The difficult searching has been done. You can spend your time building and experimenting.

Be warned! You'll be working with high-voltage high-frequency devices from another era. Tesla coils can be very dangerous. But maybe you can be the one to rediscover the secrets

Who Was Nikola Tesla?



TESLA: MAN OUT OF TIME

by Margaret Cheney

"Flamboyant, eccentric, almost supernaturally gifted, had he been born today he would still be ahead of his time. Called a madman by some, a genius by others, and an enigma by nearly everyone, Nikola Tesla was perhaps the greatest inventor the world has ever known..."

"It was Tesla who harnessed the alternating electrical current that we use today... Tesla who actually invented radio... Tesla who invented fluorescent lighting and the incredible bladeless turbine. He introduced us to the fundamentals of robotry and computer and missile science, which continued to create and transform the future..."

There are many books about Tesla, some of them are garbage written by groupies who worship Tesla as a god. Here's a great factual biography that has gotten great reviews — the story of a wizard who was Edison's enemy, Mark Twain's friend, and J. P. Morgan's client. This is the real story. Excellent book at a reasonable price. Order a copy. 310 pages "mass" paperback a few photos
Cat. no. 717 \$4.95

Build a High-Voltage WIMSHURST MACHINE

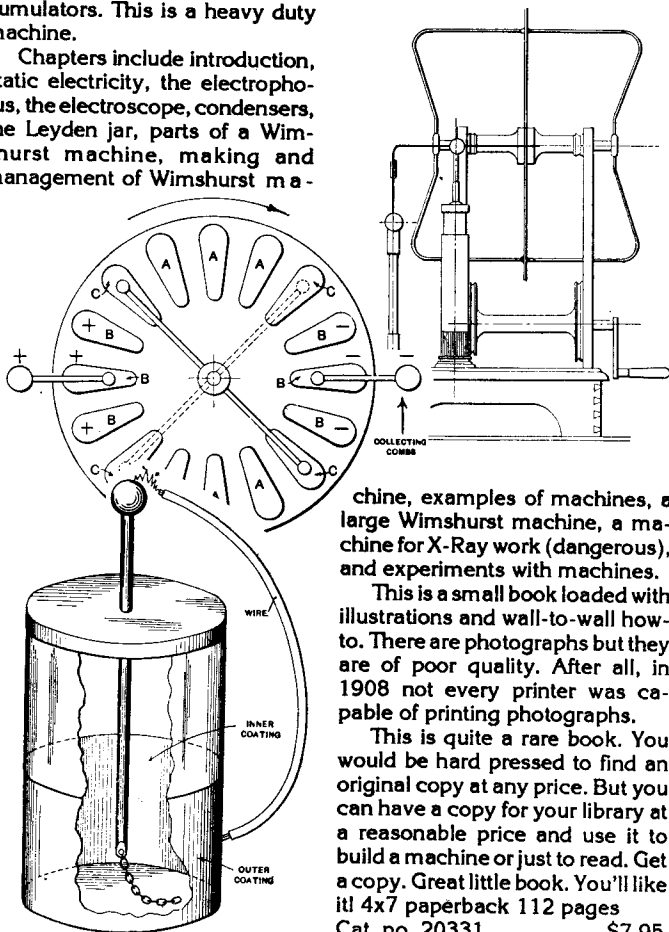
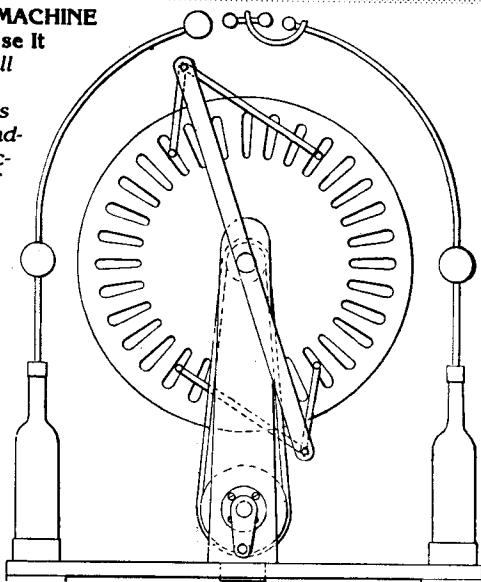
THE WIMSHURST MACHINE

How to Make and Use It
by Alfred W Marshall
reprinted by
Lindsay Publications

"A practical handbook on the construction and working of the Wimshurst machine, including radiography and wireless telegraphy, etc., and other static electrical apparatus."

Build yourself a copy of this classic lightning bolt generator. This is no toy! Its 24" plates will knock your socks off — and probably electrocute you if used with Leyden jar accumulators. This is a heavy duty machine.

Chapters include introduction, static electricity, the electrophorus, the electroscope, condensers, the Leyden jar, parts of a Wimshurst machine, making and management of Wimshurst ma-



chine, examples of machines, a large Wimshurst machine, a machine for X-Ray work (dangerous), and experiments with machines.

This is a small book loaded with illustrations and wall-to-wall how-to. There are photographs but they are of poor quality. After all, in 1908 not every printer was capable of printing photographs.

This is quite a rare book. You would be hard pressed to find an original copy at any price. But you can have a copy for your library at a reasonable price and use it to build a machine or just to read. Get a copy. Great little book. You'll like it! 4x7 paperback 112 pages
Cat. no. 20331 \$7.95

AUTO POWER

Classic 1935
text on
automobile
generator
conversions &
modifications!

AUTOPOWER — Automobile
Generator Conversions and
Modifications

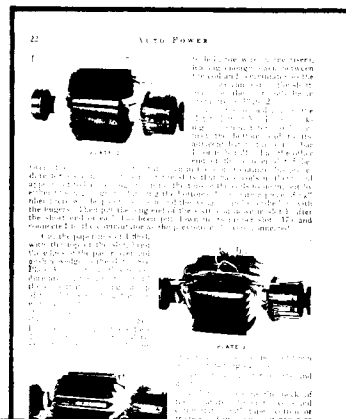
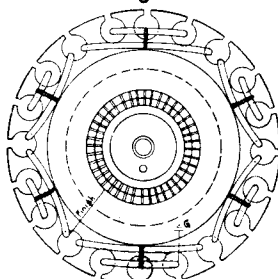
by S. W. Duncan

reprinted by Lindsay Publications

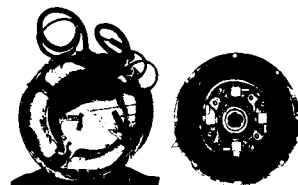
From out of the Great Depression comes this unusual book on ways to make auto generators produce unusual amounts of power. The major problem with this book is that the generators being rewound are no longer available. Even if you were to find one of the units listed it would now be a hard-to-find part for an antique car. If you were to rewind one of these antique generators, I'd personally drive over and "smack you up 'long side the head!"

If that's the case, then why would I reprint something like this? Simple. The principles taught here can be applied to modern generators, DC motors, starter motors and more. You get detailed, practical how-to that can be adapted to modern needs. In other words, this is raw material for your brain. I can't guarantee your success, but I can guarantee that the info you find here is rare, and that you'll get your money's worth.

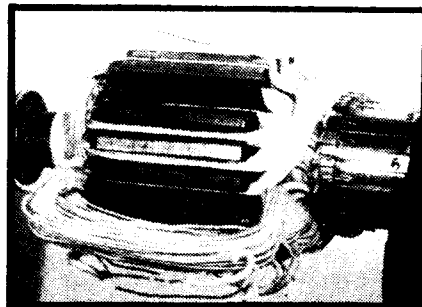
Chapters include changing a Ford Model A generator to a 110 volt alternator, get constant voltage at variable



INSTALLING A FOUR-POLE RIGGING IN THE DODGE GENERATOR



NOTE: How the connectors are made. The arrows point to the jumper. Notice the three screws in the center and the four new holes opposite each brush.



speed, converting a Dodge 12 volt generator into a 110 volt 500 watt alternator, changing a model T to 110 volt AC, making field and armature coils, changing a Delco generator to 110 Volt AC, the winding of automobile armatures, characteristics of DC generators, suggestions on mechanical construction of generators, figuring a new winding for an old frame, converting a farm light plant to 110 volt AC, and a chapter of definitions.

This is a heavily illustrated volume, wall-to-wall how-to.

Get a copy of this. It's great even if it is old. This is one of those manuals that people talk about having seen years ago, but can no longer find. It's worth having a copy just for reference. Order a copy today. 5 1/2 x 8 1/2 paperback 56 pages
Cat. no. 4791

\$4.95

STATIC ELECTRICITY!

*Unusual High Voltage Equipment!
Dozens of Unusual Experiments!*

STATIC ELECTRICITY

by J. H. Pepper

reprinted by

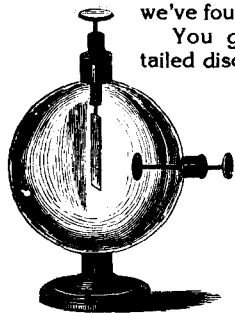
Lindsay Publications

Static electricity is a nuisance when you walk across a carpet and then watch a blue flame jump out from a doorknob to burn off the end of your finger. But this kind of electricity can also be fascinating.

Back in the 1880's when people knew little about current electricity, static or frictional electricity was a scientific curiosity in laboratories and parlours. Giant lightning generators were built by amateurs and educators and bizarre experiments performed.

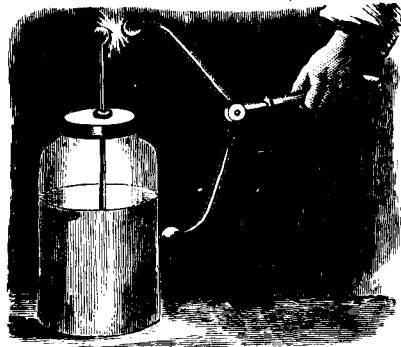
From Pepper's "Cyclopaedic Science Simplified" we've reprinted the chapter entitled "Electricity, Frictional or Statical", one of the best textbook discussions we've found yet.

You get a detailed discussion of



electroscopes, 17 electroscope experiments, Cavallo's Cylinder Electrical Machine, the Royal Polytechnic Great Plate machine, Winter's electrical machine, the Holtz machine, the Electric Well experiment, experiments in induction, charge storage techniques, lengthy discussion of Leyden jars, the Leyden battery, followed by another thirty experiments including Cuthbertson's Balance Electrometer, the electric bomb, Harris's thundercloud needle, and a couple of machines for generating high voltage with a steam jet! And there is much more.

Everyone seems to be building electronic devices with in-

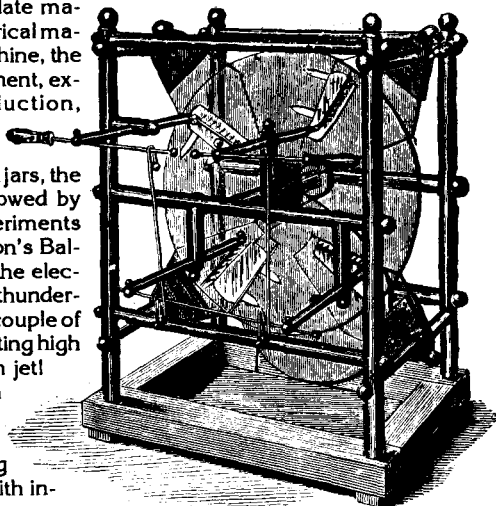


tegrated circuits. No one seems to know about old time electricity. Here, in one volume are forgotten electrical devices, principles, and experiments. You'll find page after page of unusual information and illustrations.

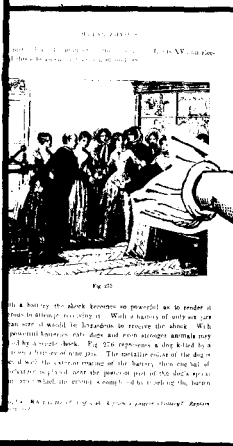
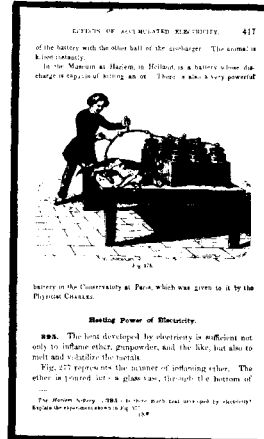
There are a lot of old science textbooks available in old bookstores for little money. But a really a good discussion of static electricity like this one is hard to find.

Although this is not really a cookbook for building equipment, the wood engravings are quite detailed, and the text describes the equipment thoroughly enough that you could probably build the devices without great trouble. This is a great source for unusual science fair projects.

If you like to explore old scientific principles, build unusual apparatus, or just impress your friends, consider a copy of this unusual book. I think you'll like it. 5 1/2 x 8 1/2 paperback 88 pages Cat. no. 4783 \$5.95



Peck's Electrical Recreations



William Peck's ELECTRICAL RECREATIONS

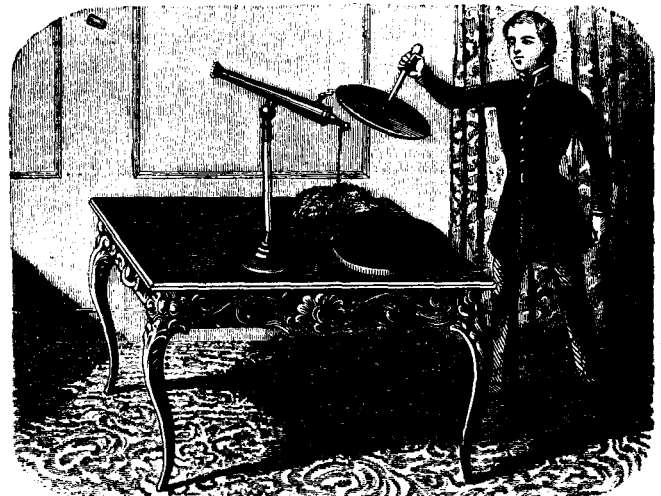
reprinted by Lindsay Publications

Go back to 1860 and discover static electricity experiments designed to inform and entertain students studying physics in schools and academies.

If you've collected other early static electricity works, you'll find some of this to be old hat. But other parts will be new and quite interesting.

Learn about the electrical chime, an electrified puppet, the electrical wheel, the electrical egg, the electrical square, the electrical cannon, the condenser of Epinus, using the condenser, slow and fast discharge of the condenser, the Leyden jar, a battery of Leyden jars, the condensing electrometer, electrocution of dogs!, heating power of electricity, and the mechanical effects of electricity.

You'll find fascinating old time wood cuts illustrating almost every article. If static electricity is your field, you'll want to add this low-cost booklet to your reference library. Very interesting and very unusual. Get a copy. 5 1/2 x 8 1/2 2 booklet 24 pages Cat. no. 839 \$3.25



Electrical Instrument Making for Amateurs

*Build Unusual
Electrical Equipment
from 1888!*

ELECTRICAL INSTRUMENT-MAKING for Amateurs

by S. R. Bottone

reprinted by Lindsay Publications Inc

The words "electrical instruments" bring to mind test equipment: meters, signal generators, and oscilloscopes. But back in 1888 when this volume first hit the bookstores, electrical instruments could be anything from simple Leyden Jar capacitors and static electricity machines to dynamos and telephones, as well as ammeters, voltmeter and galvanometers.

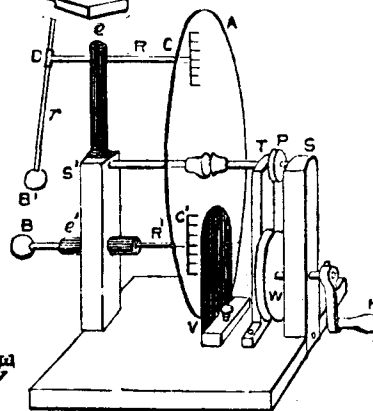
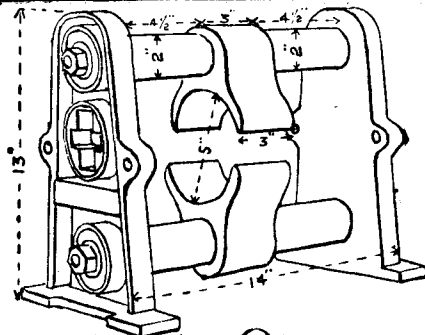
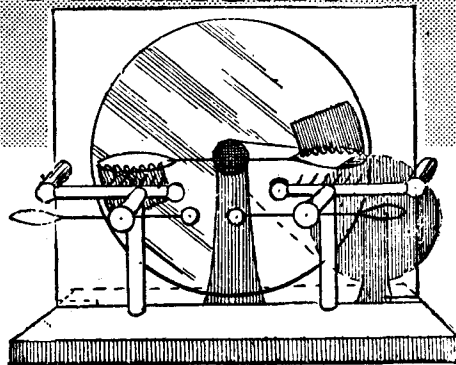
With this as your guide you can go back a hundred years and imagine what it must have been like to be experimenting right at the cutting edge of technology. You can build your own batteries from scratch, use them to run a shocking coil while you monitor the current draw with homemade meters!

You get basic information on materials, soldering, and working glass. Then you build pith ball and gold leaf electroscopes, a Coulomb torsion balance, and Volta's electrophorus static generator. You'll learn how to take a sheet of glass and cut a circle from it, drill a hole in the center and use it to build Bertsch's high-voltage static generator, Carre's Dielectric machine, a Holtz machine, and a Wimshurst influence machine. Any one of these machines is powerful enough to shock the underwear off Aunt Annabelle! And you get info on building a Leyden Jar, Franklin plates, and a microFarad condenser.

Next come the devices that use current electricity. You'll learn how to build a medical

coil that produces a 1/2" spark, or if you care to make a simple modification you can get 1" spark, in which case the machine is called an induction coil. With a powerful magnet you can make a shocking machine which appears to be little more than a simple magnet. Then you build a uni-direction current machine (a motor), a dynamo, an ammeter, a voltmeter, a galvanometer, and a thermopile that produces electricity directly from heat.

You'll be shown how to build batteries, a single fluid cell, a double fluid cell, and using these two basic configurations how to create powerful batteries using chemicals from zinc chloride and sulphuric acid to sal ammoniac and potassium dichromate which are more commonly known as the Daniell, Bunsen, Smee, Walker cells and others.



Then you get simple plans so that you can build a working electrical telephone, the newest rage a hundred years ago. And finally you get a couple of appendices that add additional information on galvanometers and batteries.

Obviously so many topics are covered in such a small book that

the number pages devoted to each topic are necessarily limited. Any one topic could really be expanded into a book of its own. But even so, you get enough useful information to build working equipment. The illustrations are primitive by today's standards, but are very informative nonetheless.

This is a fascinating book you're sure to enjoy. Lot's of valuable information at a price far below what you would have to pay for a now-rare original copy. With this book you can go back and rediscover the world of electricity. Get a copy. You'll really like it. 5x7 paperback 183 pages

Cat. no. 4929

\$9.95

EDISON



Edison— A Biography

by Mathew Josephson

Edison—the inventor's inventor. Everyone has heard of him. But are all the wild stories we've heard really true? What kind of a guy was he?

Edison never really attended school. He was taught by his mother, and his father was a strange man. Edison's first adult job was as a telegrapher which later led him to invent repeater relays, automatic telegraphs, circuits for sending several different telegraphs in different directions over the same wire, and on and on. He even got himself in the middle of a bitter fight between the robber baron Jay Gould and the Western Union monopoly—talk about dirty pool!

To get away from New York, Edison built a lab in Menlo Park, New Jersey. And for ten years excited the world with new inventions from the phonograph and electric light to the electric locomotives and even parts of the telephone (Alexander Graham Bell beat Edison to the patent office by just days.)

By the time Edison went back to New York to build the electric system, he was already a millionaire (at 28). Then came a new lab in West Orange, a second wife (after his first died), moving pictures, an ore separator, an alkaline battery and much more.

Here's the inside scoop on the man who is considered the first professional inventor. You'll find that Edison didn't have time to pursue all his ideas, and that there are probably ideas and inventions waiting to be resurrected somewhere in the more than 1000 patents Edison held.

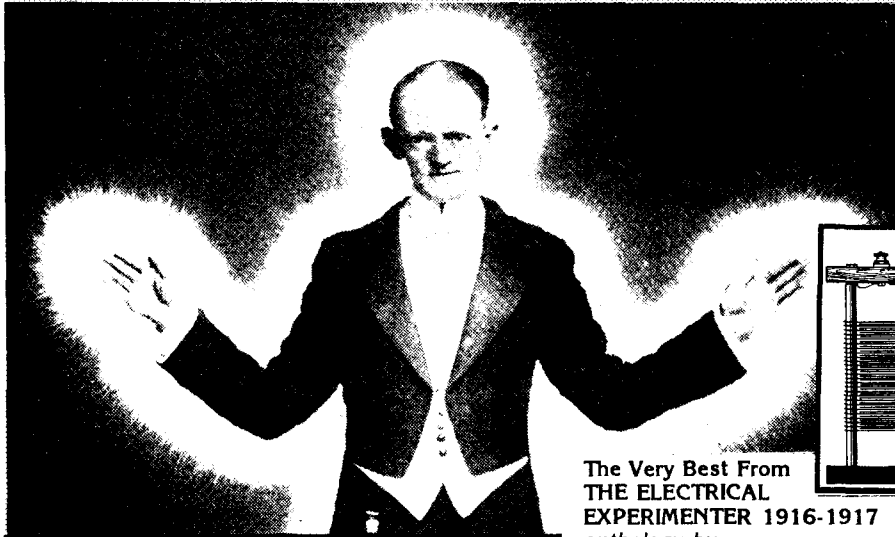
Read about this incredible guy. Edison's wife finally put her foot down when the inventor turned 75 and told him he has to work fewer hours — so he cut back to 16 hours a day!

Get a copy of this. If you enjoy technology, inventing, collecting, or just about anything you see in this catalog, you should find this biography quite interesting. It's a little slow reading in places, but it's loaded with details that will tell you the truth about what happened and why. After you read this, you can better appreciate who Edison was and why this country and the world is the way it is today. Excellent book. Quite reasonably priced. 6 x 9 paperback 512 pages with photos

Cat. no. 727

\$10.95

The Very Best from the ELECTRICAL EXPERIMENTER 1916-1917



CONTENTS

Collin's Radiophone Arc
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Rotary Spark Gaps
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tectors
Chromic Acid Battery
Construction of Wheat-
stone Bridge
Lightning Made to Order
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paratus - Induction Coil
High Frequency Resonator
for Spark Coils, Making
Chlorine
Transmitting Your Photo
Over a Wire
Armstrong Regenerative
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Condenser, Electric
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Radio Detector Develop-
ment
Gas Batteries
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Construction of a 6-Volt,
25 AH Storage Battery
Bottle Tesla Coil,
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Hints & Tips

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Lecturers
Amateur and Experimental
Radio Research
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& War
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Laboratory Vacuum
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Regarding Tesla & Oudin
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How to Use High
Frequency Currents in
the Treatment of
Disease

The Very Best From THE ELECTRICAL EXPERIMENTER 1916-1917

anthology by
Lindsay Publications Inc

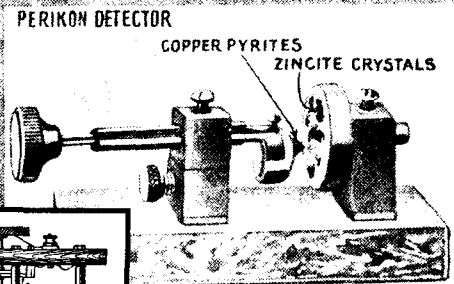
You can go back to read the very best articles from one of the earliest hobbyist electronics magazines published. Gemsback's Electrical Experimenter was filled with basic information, ads for early equipment, and most importantly how-to projects designed to be built from the most primitive materials.

Readers learned how to build unusual crystal set receivers with unusual detectors, high power wireless sets, and all the equipment that went into their construction. Today, you buy electronic equipment, put batteries in it, and turn it on. Back then you built your batteries!

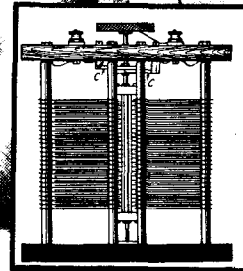
You'll find how-to articles on high voltage Tesla coils, induction coils, spark gap construction, batteries, detectors, water power systems, selenium cells for experimenting with primitive television systems, and more.

You get theoretical papers by MD's describing how new electrical equipment would revolutionize medicine. You get history on Fessenden and Tesla. You'll learn how to measure capacity, and much more.

You get the very best articles from this two year span, and by best we mean plans



11



VACUUM BULB
COLD METAL CYLINDER
HEATED FILAMENT

14

and information that is very difficult to find today. Many articles that cover the basics of electricity were omitted because you can find comparable material in modern magazines. Some plans were omitted because they were not unusual enough, such as motor and dynamo plans. You can find such plans in many old books.

What you will find is solid, interesting and useful information. Be careful, though! Some of this info is downright dangerous. You can get yourself electrocuted. You can give you and your neighbors cancer if you build and operate an X-Ray machine. Be very careful.

This is a great collection of rare material — something you should have in your reference library. Wall-to-wall il-



ustrations! Interesting reading. Order a copy! 8 1/2 x 11 paperback 108 pages Cat. no. 20137 \$9.95

You should know that most of the photographs in this book are not of the best quality. Poor originals, yellowed paper, oversized pages have combined to make the photographs "muddy". The drawings are very sharp, and most type is quite readable, but the photos leave something to be desired. All we can say is that we did the best job we could. See what you think.

Experimental Physics

Procedures in EXPERIMENTAL PHYSICS

by John Stong
reprinted by Lindsay Publications

If you consider yourself an experimenter, an inventor, or a builder of unusual machines and equipment, you must have a copy of this fantastic classic text. No two ways about it.

You'll find wall-to-wall practical how-to and incredible illustrations on almost every one of the more than 600 pages. Chapters include: laboratory glass blowing, laboratory optical work, technique of high vacuum, coating of surfaces by evaporation and sputtering, the use of fused silica, electrometers and electroscopes, geiger counters, vacuum thermopiles and the measurement of radiant energy, optics, photoelectric cells and amplifiers, photography in the lab, heat and high temperature, notes on the materials of research, notes on the construction and design of instruments and apparatus, and molding and casting.

This is some incredible stuff! Learn how to blow glass and make aspirators, distillation condensers, and so on. Learn how to seal copper to glass so that you can imbed electrodes. This could be handy for trying to make light bulbs, vacuum tubes, or x-ray tubes maybe.

Learn how to rough cut lens blanks from large plates of glass and then grind them into lenses on your homebuilt lens grinder. Learn how to make a parabolic telescope mirror using the standard techniques. Learn to make unusual equipment to test the finished mirror. Learn how to grind a Schmidt lens.

To create high vacuum you'll read about roughing pumps, the vapor pressure of waxes, getters for creating the highest vacuums, and learn to make a variety of diffusion pumps using mercury and oil. See charcoal traps, kinetic vacuum systems, vacuum gauges of all types. Remember, all this comes with construction details.

Learn how to silver mirrors with a variety of methods including vacuum sputtering. You'll find extensive details on the evaporation technique for aluminum.

Fused quartz is valuable because unlike glass it can withstand extreme temperature changes without shattering. Learn how to build micromanipulators and all the rest of the equipment to produce tiny fibers that can be used for suspending the elements of an electrometer, for cross hairs in optical instruments, or for building a balance. The microbalance shown is supposed to be sensitive down to a billionth of a gram per division!

And there's so much more! Build a Compton adjustable quadrant electrometer, a Hoffman electrometer, and others useful for x-ray and cosmic ray work. Build a Geiger counter. You can build your own Geiger-Mueller tube if you master the high-vacuum technique taught earlier. Unfortunately, most of the electronics described is

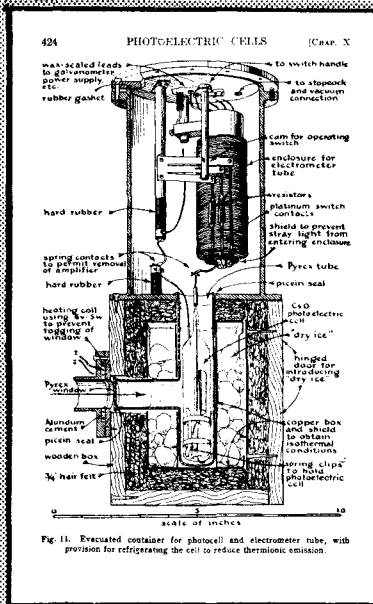
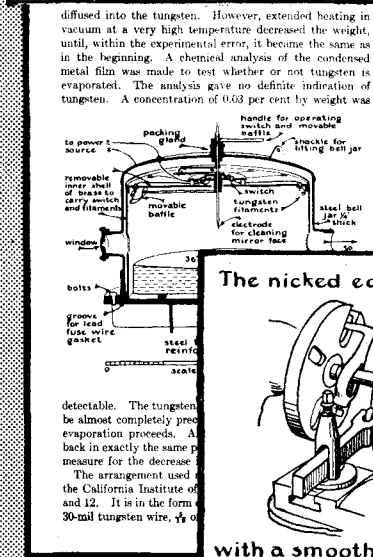


Fig. 11. Evacuated container for photocell and electrometer tube provision for refrigerating the cell to reduce thermionic emission.



based on vacuum tubes of fifty years ago rather than on transistors.

Build vacuum thermopiles that measure infrared, visible light and ultra-violet so accurately that they can be used to calibrate photographic lightmeters and such. You've heard of carbon arc lights, but do you know how to build *iron* arc lights? Or low pressure mercury arc lights? And others? You can even build a machine to measure the wavelength of colored light.

You'll find details on hydrogen furnaces, crucibles, burners, electric arc furnaces, and even a lab setup for making artificial rubies and sapphires! And there's much more - even down to what we consider the "easy stuff" like using a lathe and sand casting.

You should see by now that this is a fantastic book loaded with construction secrets for unusual equipment. And you should now understand how a book first

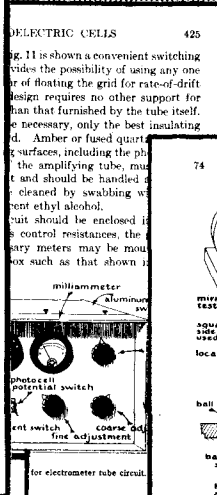
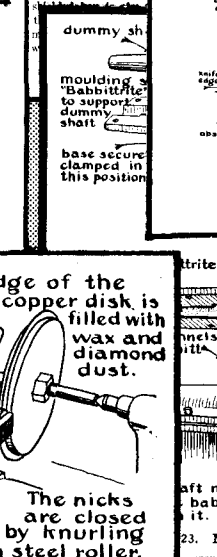


Fig. 11 is shown a convenient switching circuit which provides the possibility of using any one of the three tubes for rate-of-drift measurements. This design requires no other support for the tubes than that furnished by the tube itself. The design is necessary, only the best insulating material should be used. Amber or fused quartz is recommended for the surfaces, including the phosporous surface of the amplifying tube, must be handled with care and should be handled and cleaned by swabbing with reagent ethyl alcohol. The circuit should be enclosed in a metal box to control resistances, the primary meters may be mounted in a metal box such as that shown in



**Incredible
laboratory
processes
revealed!**

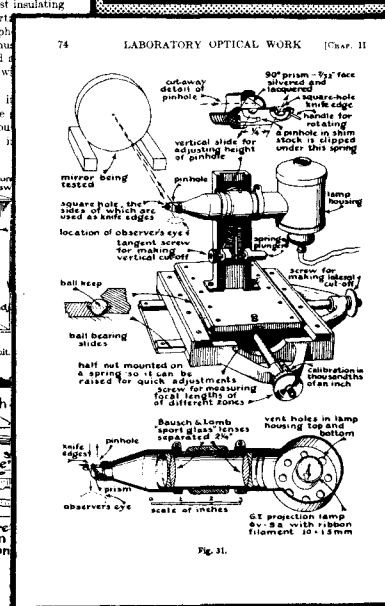
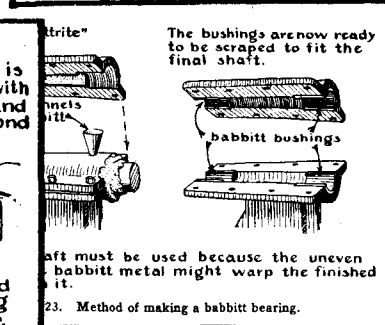


Fig. 31.



published in 1938 went through a couple of dozen printings! It's a classic. It's incredible. You should have a copy for reference if nothing else. Highly recommended. Order a copy today.

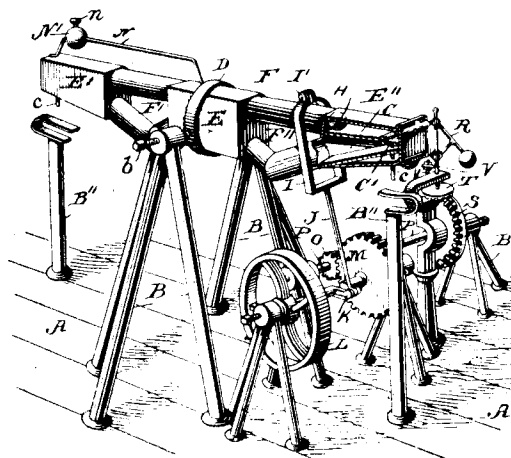
5 1/2 x 8 1/2 sewn paperback 642 pages
Cat. no.4562 \$23.95

Something you should know.....

This is no ordinary paperback book. "Experimental Physics" is printed on acid-free paper and is sewn like a hardcover book to prevent pages from falling out.

According to pricing formulas, it should sell for much more. If a book like this were released today by a certain major book publisher whose books I've carried from time to time, they would charge from \$45 to \$65 a copy. Maybe even more. At \$23.95 it's a steal. Get a copy.

FIFTY Perpetual Motion Mechanisms

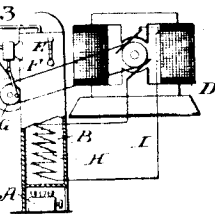
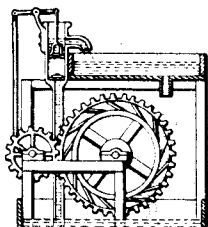


FIFTY PERPETUAL MOTION MECHANISMS

by Fred Dieterich
reprinted by Lindsay Publications

The author was a patent attorney at the turn of the century. I suppose that so many people considered themselves inventors and presented him with so many headaches that he wrote a book entitled "The Inventors Universal Educator" covering the process of securing a patent. It sold for many years starting 1899.

One short section of his book covers perpetual motion inventions which are unpatentable. Dieterich, who was outraged by claims of



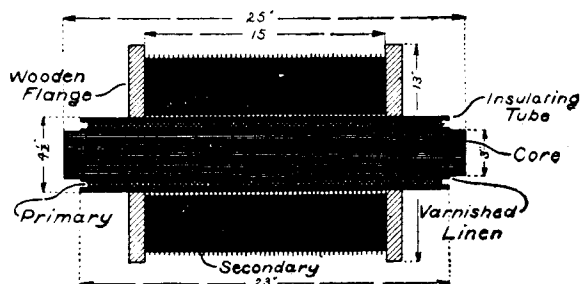
perpetual motion, presents drawings of 50 different mechanisms. No doubt, you've already seen a number of these, but others are unique, and all are interesting.

You'll see the Marquis of Worcester wheel, the Horace

Wickham machine, the 1868 device of Dr. Drasch of Austria, an electric device, the self-moving railway, the Orfyreus 1720 wheel, a complicated water screw, and others.

If you're into PM, you'll want to add this to your collection. Maybe you're trying to build a machine and want to avoid previous failures. Or you're a skeptic and want a good laugh. Whatever, the material is interesting and the price is low. Get a copy. You'll like it. 8 1/2 x 5 1/2 booklet 22 pages
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\$3.75



High Power Wireless Equipment!

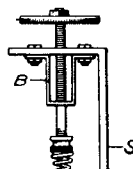
HIGH POWER WIRELESS EQUIPMENT

by Alfred Morgan
reprinted from
Popular Electricity Magazine 1910-11

If you wanted to try your hand at the newest 1910 electrical craze of transmitting telegraphy without wires, you had to build your equipment. The few pieces of equipment available commercially would probably have been way beyond your pocket book.

Here, in a series of fifteen installments, Alfred Morgan provided his readers with complete, detailed, dimensioned directions for building everything from the key to the aerial, from the induction coil and spark gap, to the helical transmitting coils. As a slice of early radio history this is fascinating reading.

You won't want to build a spark-gap transmitter, they're inefficient and illegal to operate. But you'll find bits and pieces quite valuable. If you build crystal sets,



you'll find the detectors very valuable.

If you like to build high voltage equipment, you'll find the induction coil, spark gaps, condenser and other plans useful. Early transmitters were essentially Tesla coils turned off and on with a key. A later chapter actually describes Tesla and the work he did, how to build one of his coils, how to use his equipment in wireless telegraphy.

And you'll find a chapter loaded with hints and kinks on everything from building condensers and using a coherer detector to how enamel wire and make a variometer.

This is all practical hands-on early radio and high-voltage electricity reprinted from the original hard-to-

CONTENTS:

- Aerials
- Aerial Switch & Induction Coil
- Induction Coil Secondary; Key
- Independent Adjustable Interrupter
- Oscillation Condenser
- Transmitting Helix
- Hot Wire Ammeter
- Two KW Closed Core Transformer
- Two KW Transformer Cont'd
- Detectors
- Detectors Cont'd
- Potentiometer; Fixed Condenser
- Loose Coupled Tuning Coil
- Variable Condenser
- Directions for Operating
- Tesla and His Wireless Age
- Construction of Tesla High-Frequency Apparatus
- High Frequency Apparatus for a Wireless Set
- Hints and Kinks

Tesla Equipment, Crystal Detectors, Rare Radio Equipment from 1910-11! Great How-To!

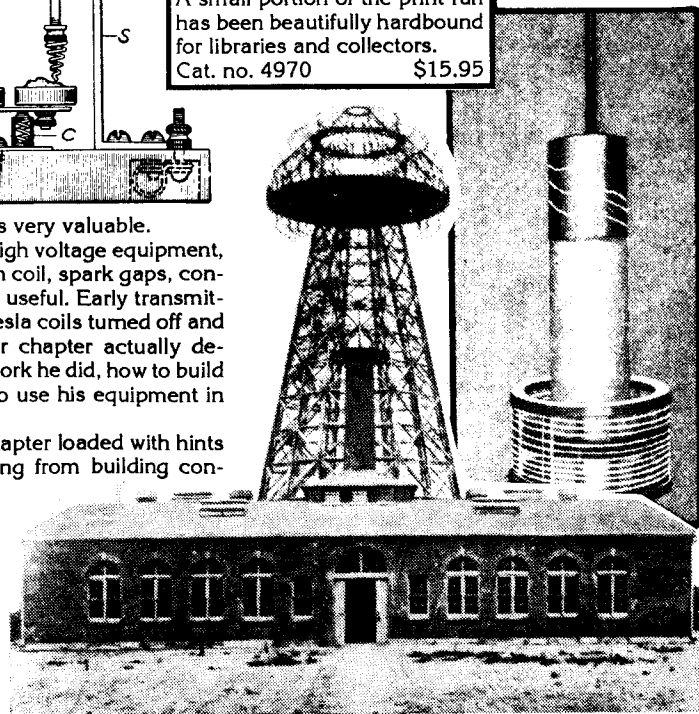
find magazines. Think about the possibilities. It might be fun to build an old wireless station just to show people today how it was done before semiconductors. No matter what your angle or interest is, you'll find this detailed how-to to be fascinating. Excellent rare, early information! Order a copy of this. It's worth having.

5 1/2 x 8 1/2 paperback 99 pages
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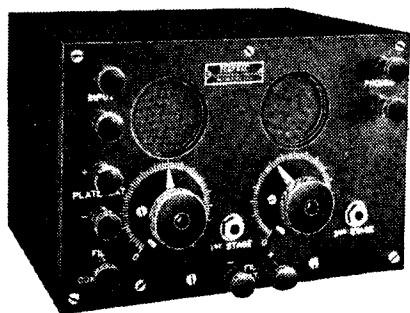
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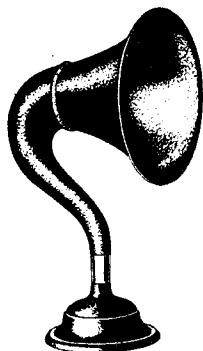
Radio of the 1920's!

Incredible collection of ads, photographs, magazine articles!



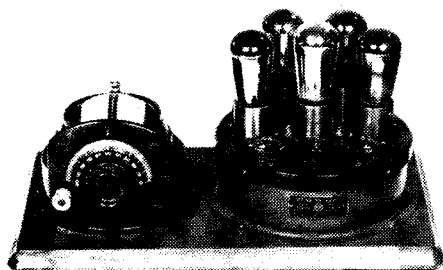
RADIO MANUFACTURERS OF THE 1920's by Alan Douglas

If you love old radio equipment like I do, you'll really enjoy this. This, the first of several volumes, covers apparatus manufactured by A-C Dayton through J. B. Ferguson.



You get a big book of wall-to-wall illustrations of home console radios, crystal sets, regenerative sets sold to receive messages from MacMillian's North Pole expedition in 1925, ads for parts, magazine articles taking you inside radio factories and much more.

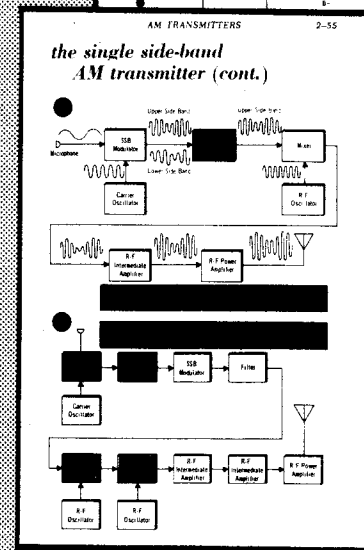
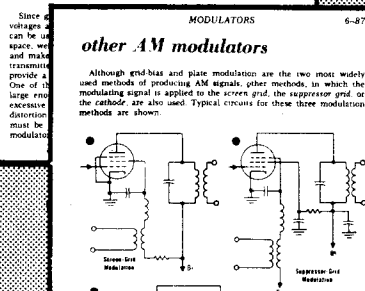
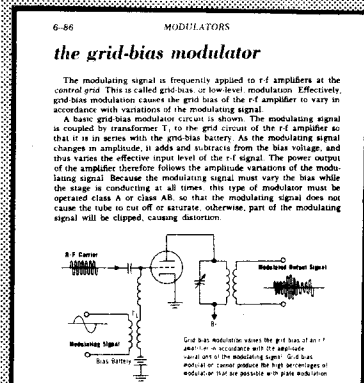
This is nostalgia, rather than how-to. But! If you're building old circuits, doing restorations, or just want to build a radio that looks old, you'll find more ideas than you can ever use. You'll like this "time



machine" back to the 1920's when radio was taking off.

As an old radio buff, I wish I had published this. I think you'll like it, too. 8 1/2 x 11 paperback 225 pages
Cat. no. 356 \$19.95

Incredible Electronics Textbook!



ELECTRONICS 1-7 2nd Edition edited by Harry Mileaf

I've seen a thousand electronics books from the oldest to the newest, and in my opinion, this one of the very best I've seen. If you're new to electronics or just need a great reference for those areas in which your knowledge is weak, then this book is for you.

What I like is the simply written, yet detailed and complete text and the clear informative illustrations that drive home the lessons being taught. Some books race through complex topics and don't really explain themselves. Not

You'll find almost everything!

DC signals	magnetrons
AC signals	klystrons
modulation	semiconductor theory
side bands	PN diode
side-band modulation	junction capacitance
AM	zener diodes
FM	tunnel diodes
pulse modulation	junction transistors
multiplexing	gain
television	transistor circuits
stereo FM	bias & stabilization
navigation signals	oscillation
facsimile	frequency response
mixing frequencies	thyristors
waveshaping	field-effect transistors
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demodulators	load resistors
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AFC circuits	phase splitters
AGC circuits	RF amplifiers
counters	frequency-multipliers
gates	traps
feedback circuits	LC oscillators
AM transmitters & rcvrs	crystal oscillators
FM transmitters & rcvrs	RC sine-wave oscillators
UHF rcvrs	relaxation oscillators
RDF finders	mixers
vacuum tubes	converters
diodes	discriminators
triodes	gating circuits
triode operation	counters circuits
load lines	limiter circuits
bias tetrodes	antennas
pentodes	and much, much
phototubes	MUCH more!

here! The authors take their time and really teach.

Originally, this book was issued as seven paperbacks, no doubt for schools. Here you get all seven books in a single hardcover volume. Yes, it's expensive, but it's cheaper than buying the individual volumes, and you definitely get your money's worth. The table of contents alone, is eighteen pages long!

This is not a how-to projects book. This is a textbook that teaches the electronic principles behind the equipment you buy and build. You'll learn the complex terms, how components work by themselves and together to build up complex systems.

Again, this one of the very best electronics course I've seen. If you need just one good electronics book then this is it. There are many other good ones on the market, but I'd put my money on this one any day. (I wish I had published it!) Great book. This should be on every electronics-buff's reference shelf. Order a copy! 6x9 hardcover almost 1000 pages wall-to-wall illustrations

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Home Mechanics

Great collection of old-time projects! ...from steam power to radio!

HOME MECHANICS

edited by Archibald Williams

Try your hand at a these World War I vintage projects!

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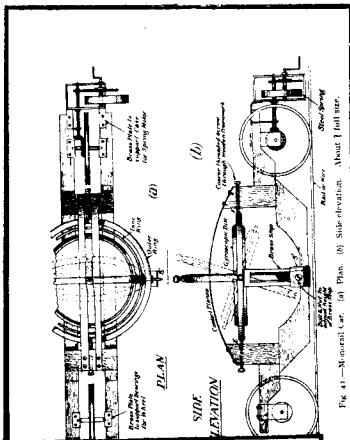
Learn about fretwork, overlaying in wood, metals, xylonite, and more. You'll even learn how to build a spark-gap wireless transmitter which would probably get you put in jail if you were to really put it on the air!

You'll find the models are generally not all that complex, yet they really work. Even if you don't build the models exactly as described, you'll at least get great ideas adaptable to other uses.

A great little book of projects. One of the better collections I've seen. I think you'll like it. Order a copy today. 4 1/4 x 6 paperback 297 pages

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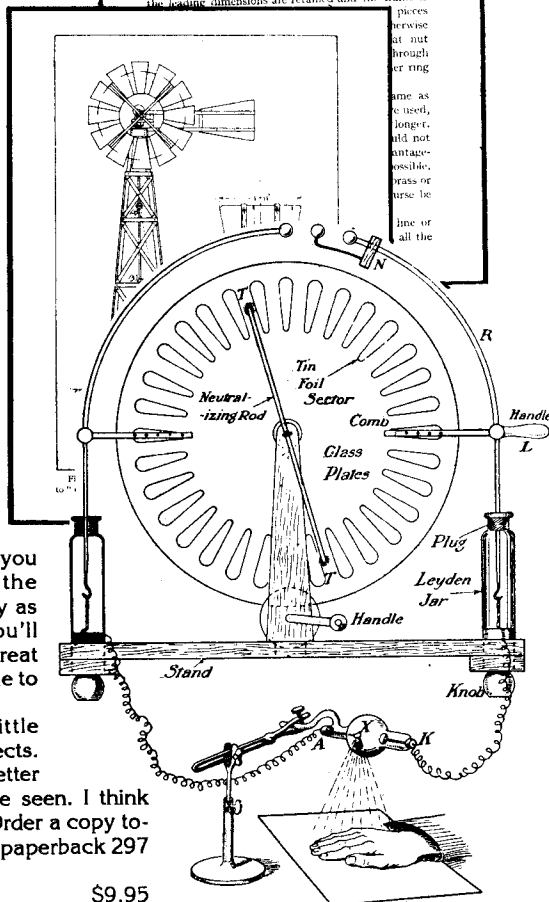
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GYROSCOPIC MONORAIL RAILWAY. 147

them by hammering them on what is intended to be their concave side. The end holes to take the screws or nuts which attach them to the framework should be a rather loose fit to permit delicate final adjustment by tapping before the screw or nut is tightened up hand.

The Framework.—The wooden framework shown in plan in Fig. 41, 2, and in elevation in Fig. 41, 6, next demands attention. Poplar or American whitewood is a very suitable wood, being light, free from knots, and easy to work. The actual manner in which the framework is constructed is immaterial, so long as the leading dimensions are retained and the frame is



NEON SIGNS

Great How-To on Glass Blowing, Vacuum Systems, High Voltage and more from 1935!



NEON SIGNS

by Miller & Fink

reprinted by Lindsay Publications

Sure. Equipment, techniques, and sign design have changed since this book first appeared in 1935, but not all that much.

Even if you're not interested in making neon signs, you'll find loads of useful information on rare gases, glass blowing, and vacuum systems that could be useful in experimental physics, high voltage, or even in building your own experimental vacuum tubes!

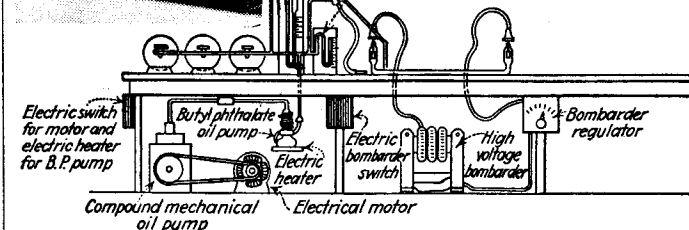
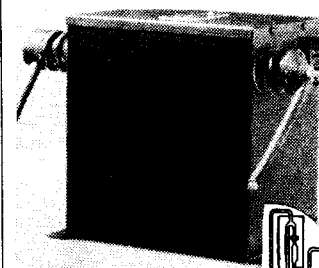
Chapters include the luminous tube, materials, electrical equipment, types of signs, designing the sign, glass bending, pumping systems, bombarding, filling, testing, aging, installation equipment, special applications, tricks of the trade and more!



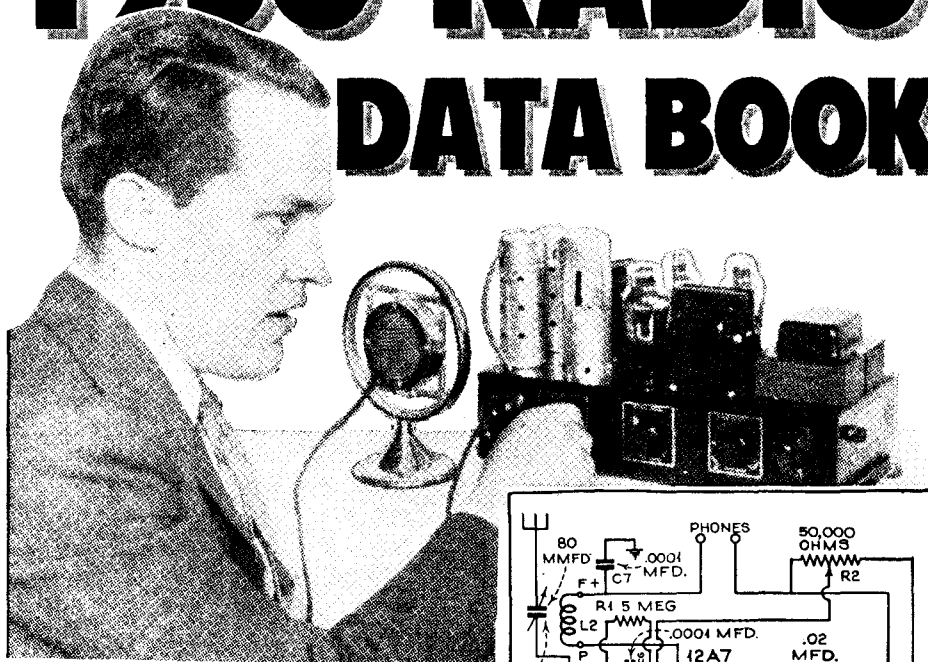
This is a quality straight-to-the-point book loaded with diagrams and photographs that you won't find just anywhere. It might be fun to make bizarre neon signs, repair "antique" signs, or just get into the trade. But even if that's not your goal, you'll find loads of unusual, interesting information. Consider this carefully. It certainly is NOT run of the mill. Order a copy. 5 1/2 x 8 1/2 paperback 288 pages

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\$12.95



1936 RADIO DATA BOOK



**Great Fun from
the 1930's!**

1936 RADIO DATA BOOK

by Radio News Magazine
reprinted by Lindsay Publications

Get the latest radio news by studying the best articles from the 1935 issues of Radio News and Shortwave Radio Magazine.

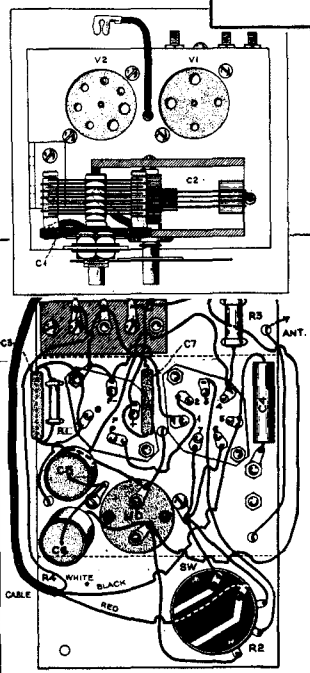
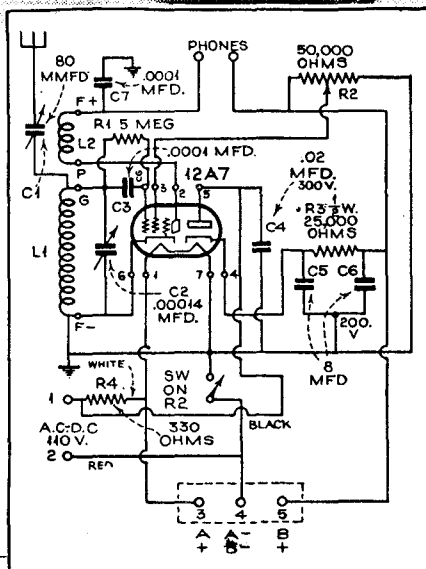
Learn about the latest developments in television - disk scanning versus cathode ray systems. Learn about a new Canadian television station.

You'll discover the brand new metal octal-base tubes and the receivers that use them such as the Atwater Kent 649, the GE A-82, and the Super Sky rider. You get plans for shortwave radios: a single tube all-wave set, a 3-band set, and 9-tube amateur receiver, and more.

Amateurs learn how to build transmitters, a 3/4 meter transceiver, and how to use the latest transmitting tubes.

Learn to build broadcast receivers: a universal superhet, a 2-volt DX'ers Super, a Superhet De Luxe, and more.

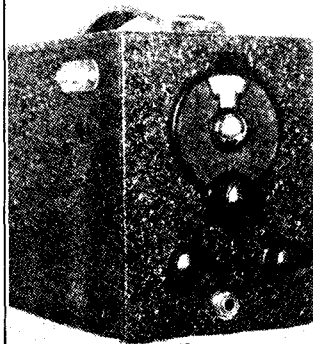
You also get articles on servicing, on audio amplifiers, on engineering design, and on radio experimenting. And you also get lists of stations broadcasting in the US and world shortwave



stations. Every page will well illustrated with photos, schematics, drawings and tables.

This is a fun book for old-time radio buffs. It's useful if you're a builder, and great reading whether you build or not. Another fascinating book for your radio reference library. 8 1/2 x 11 paperback 64 pages
Cat. no. 20218

\$5.95



EXPERIMENTAL SCIENCE

by George M. Hopkins

Fantastic! There is no other way to describe this incredibly illustrated two-volume set from 1906. It is certainly worth having.

Starting about 1889 "Scientific American" Magazine published a regular column by George Hopkins showing readers how they could build experimental equipment and test their own versions of new inventions such as the electric light, telephone, and phonograph. Hopkins' columns were routinely reprinted in books, and this 25th edition from 1906 had to be split into two volumes. And what a pair of volumes they are!

You'll find some of the most fantastic wood engravings ever, illustrating experimental equipment of all types.

Volume One consists of nineteen chapters on rest, motion, force, gyroscopes, liquids, gases, sound, heat, light, polarized light, microscopy, photography, magnetism, frictional (static) electricity, dynamic electricity.

Build a gyroscope, Foucault's pendulum, a simple hydraulic press, a hydraulic ram, simple air pump, Geissler tube, a recorder for sound vibrations, device for production of sounding waves, a simple phonograph, centrifugal siren, and Norremberg Doubler. And these are just a few of the projects in only the first half of the first volume!

You can build a simple microscope and accessories, or a simple camera with plate holder, make Daguerreotype photos like those from the 1840's (dangerous), experiment with magnets, static electricity, build all kinds of batteries, a device that converts heat directly into electricity, build bells, electromagnets, and even a 1/4 hp electric motor.

Volume Two will take you into more electricity by investigating AC electricity, arc lamps, high voltage induction coils, and much more. You can build a telephone. Build a magic lantern and perform a variety of interesting projections.

You'll get practical how-to on blowing glass, making lenses, etching glass, making test tube racks and the like, making and using a crucible furnace, sand casting, making carbon rods and plates, and more.

You'll be shown how to perform a variety of scientific parlor tricks. Discover scientific uses for the phonograph, build an opaque projector, and a simple acetylene gas generator. Try experiments with super cold liquid air, or new advances in photography including color photography, divining rods and metal detectors, long distance telephony, new wireless telegraphy, building an electric clock, high voltage experiments, even poly phase electricity!

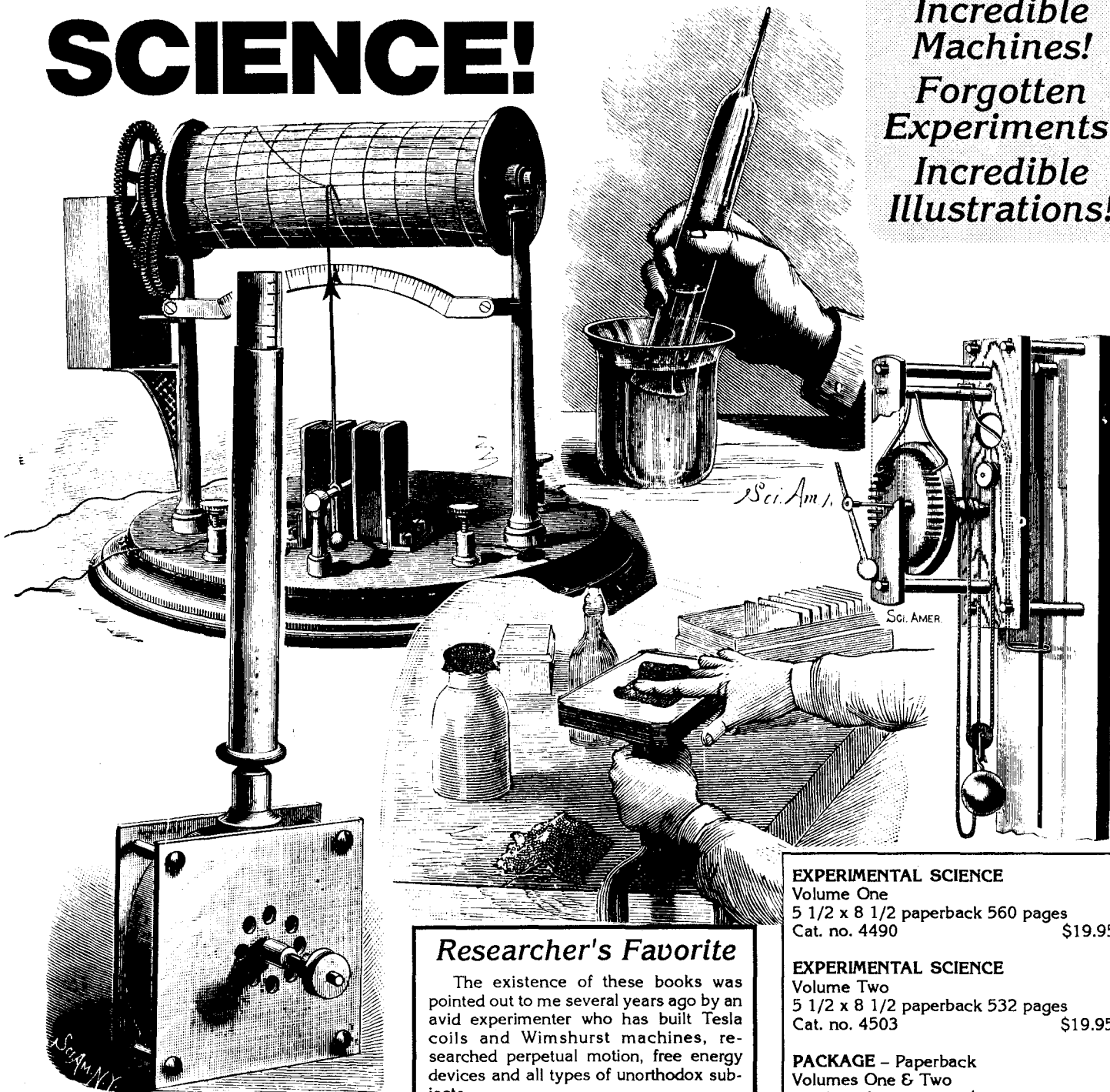
If you haven't guessed by now, this is both an introduction to physics and simple directions for building strange mechanical equipment.

The how-to you get is not overly detailed. You're expected to have some mechanical ability. You *WILL* get excellent illustrations that will show you almost everything you need to know. Any additional secrets are pointed out in the text.

If you want to build and run scientific equipment that hasn't even been seen in decades, you should have this. Kids can build a unique

EXPERIMENTAL SCIENCE!

Over 1,000
Pages!
Incredible
Machines!
Forgotten
Experiments!
Incredible
Illustrations!



Researcher's Favorite

The existence of these books was pointed out to me several years ago by an avid experimenter who has built Tesla coils and Wimshurst machines, researched perpetual motion, free energy devices and all types of unorthodox subjects.

He found *Experimental Science* to be a very valuable reference, but because of its rarity, he hadn't been able to buy a set of his own. When I told him that I was going to take a chance on reprinting the two volume set, he jumped for joy. Now he can afford his own set. So can you.

We're confident you'll find *Experimental Science* as much fun and as useful as we have.

science fair project. Old book lovers will treasure this. And if you love machines, you will get hours and hours of enjoyable reading.

It's impossible to reveal the scope and beauty of these two books in the limited space this catalog provides. But take my word for it, these are fascinating books. Top quality. Expensive, but worth the price. Look them over carefully.

EXPERIMENTAL SCIENCE

Volume One

5 1/2 x 8 1/2 paperback 560 pages

Cat. no. 4490 \$19.95

EXPERIMENTAL SCIENCE

Volume Two

5 1/2 x 8 1/2 paperback 532 pages

Cat. no. 4503 \$19.95

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Cat. no. 927

SOLD OUT

THE PERPETUAL MOTION MYSTERY

by R. A. Ford

Perpetual motion. Some people laugh at it. Others take it very seriously. Here's a serious look at these unusual systems.

First, you get a reprint of the small and now-rare "Perpetual Motion Handbook Through Entropy Reversal" published in 1967 by I. R. Barrows. Then, you get his first (and last) four "Perpetual Motion Journals" published about the same time. Each is small but filled with letters patents, ideas, illustrations, and thought-provoking suggestions.

The author jumps into a discussion of why perpetual motion might be possible, pointing out unusual theories from the past, and pointing out possible defects in current theories.

Covered are kinetic gravitational theories of the 18th century, DesCarte's Vortex Theory, LeSage's Impact Theory of Gravity, and Brush's Wave Theory. Attempts at experimental confirmation of these theories are then provided.

Natural gravitational anomalies such as solar eclipse, bulging river surfaces, bore at sea, unusual rock movements, slowly falling hail are revealed. You'll learn about Robert Cook's inertial propulsion device and its relation to Newton's Law.

The last large section covers the Orffyreus wheel built in Germany centuries ago. The author believes it might have been the only real perpetual motion machine yet invented, the secret of which was lost. You'll learn about the inventor's life, his education, his wheels, his

Perpetual Motion Mystery

A Serious Inquiry into PM!

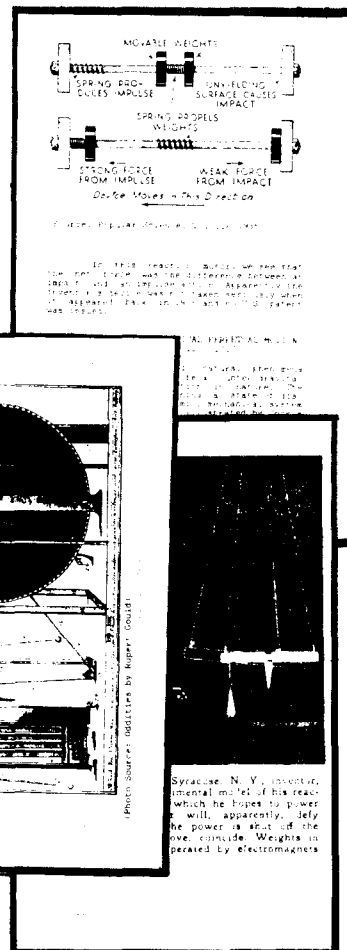
successes and failures, the tests, and more.

Last, the author, based on the material presented in earlier chapters suggests how a perpetual motion machine might be built.

You get a collection of strange, rarely seen stories and phenomena that might hold the key to perpetual motion, if, indeed, such a machine can be built.

This is not a construction manual, nor is it extremely complex. It's a notebook gathered over the years, one that should be interesting to believers and non-believers.

Consider it. You won't find anything quite like it on the market. Different. Unusual. Interesting reading. Get a copy. 5 1/2 x 8 1/2 paperback 196 pages
Cat. no. 4538 \$9.95



PERPETUAL MOTION HISTORY

PERPETUAL MOTION

The History of an Obsession
by Arthur Ord-Hume

People for centuries have attempted to build a machine that will produce more energy than it consumes. And they've all failed.

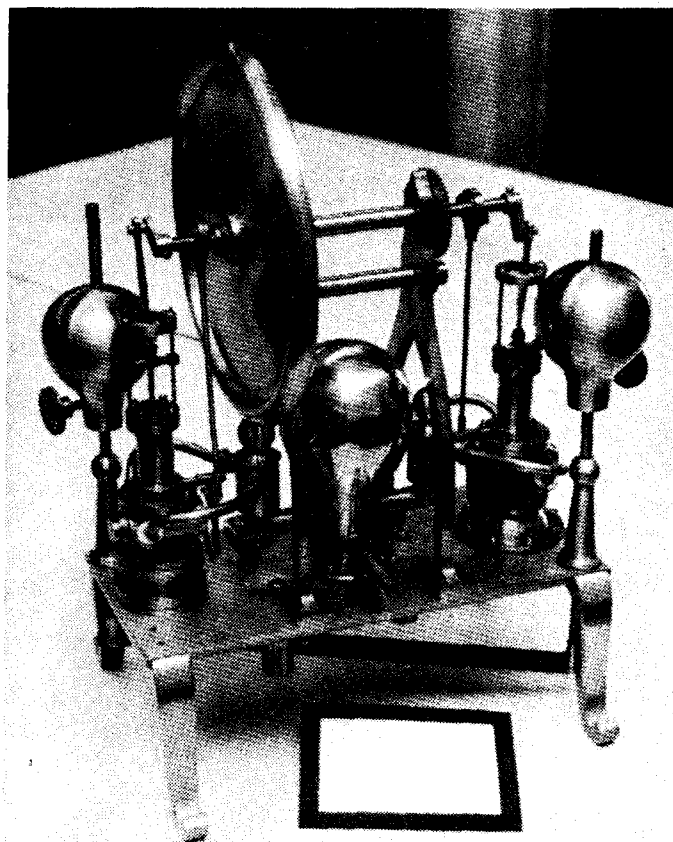
If you think you've invented a new type of perpetual motion machine, you had better read this book. Chances are, it has already been attempted.

For the rest of us, this book is interesting reading. There are some machines, that don't actually produce energy, but they run seemingly forever on a small amount of energy, like Singer's perpetual chime that was set up in 1840 and is still operating!

Learn about medieval ma-

chines, self-moving wheels, lodestones, electromagnetism, steam, capillary attraction, spongewheels, Cox's machine, the Redheffer device, the Keely motor, odd ideas about vaporization and liquification, the barring of perpetual motion devices form the patent office (although the magnet motor sneaked in), rolling ball clocks, and more. You get lots of illustrations, and an excellent list of references for further reading.

Interesting book! Well written and researched. Excellently done. If nothing else, put one in your reference library. It's not all that expensive. 5 1/2 x 8 1/2 paperback 235 pages.
Cat. no. 510 \$5.95



The Strange Books of Charles Fort

Four Mysterious Books in One!

The Complete Books of
CHARLES FORT
by Charles Fort

Strange! Very strange! A must book for anyone who researches unexplained phenomena. The dust jacket explains the book better than I can...

"Did beings from outer space visit earth in the past... are the various objects seen in the sky (flying saucers, in modern terminology) evidences of their visits?"

"What is the explanation of falls of frogs, falls of fishes, falls of seashells, which have been recorded from time to time? Are they explainable in terms of selective tornadoes, or are they evidences of a planetary mechanism that we do not know?"

"How can we answer reports of strange animals, disappearances of men from open sight, curious structures in the snow, talents like teleportation and telekinesis?"

"These are the 'damned,' by which the late Charles Fort meant all the wide range of mysteries that are ignored by orthodox science or explained away improperly."

"Charles Fort worked full time for twenty-seven years at the British Museum and the New York Public Library researching scientific journals, old periodicals, newspapers, and manuscript accounts to gather material on phenomena from the borderlands between science and fantasy. His researches appeared in four books, *The Book of the Damned* [1919], *New Lands* [1923], *Lo!* [1931], and *Wild Talents* [1932].

"In these four volumes Fort gathered together, organized and commented on a wild host of phenomena: flying saucers seen in the sky before the invention of aircraft, flying wheels, strange noises in the sky; correlations between volcanic activity and atmospheric phenomena; falls of red snow; falls of frogs, fishes, worms, shells, jellies; finding of 'thunderbolts'; discrepancies in the schedules of comets, sightings on Mars and the moon; infra-Mercurian planets; inexplicable footprints in snowfields; flat earth phenomena, disruptions of gravity; poltergeist phenomena; stigmata; surviving fossil animals; the Jersey devil; Kaspar Hauser;

Frogs & Fishes Falling from the sky!

Flying Saucers in Victorian days!

Teleportation!

Telekinesis!

Mysterious Planets!

Unusual gravity!

Poltergeists!

Living Fossils!

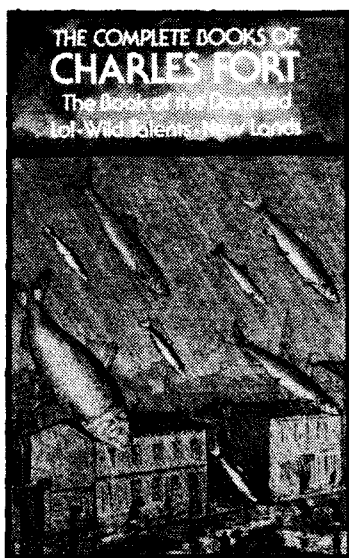
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Mysteries unexplained by science!

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Four books reprinted in one hardcover volume!

Incredible collection of mysteries!



spontaneous combustion....

"Charles Fort himself never really explained his phenomena... yet through the years his following has grown...."

In this three-inch-thick hardcover book you'll find more details on more strange, unexplained events than you'll find anywhere else. It's an incredible collection that should be part of any library on fringe science. If you specialize in the gray area at the outer edge of science, you must have a copy of this. Recommended.

No illustrations, but there is a complete and detailed index.

5 1/2 x 8 1/2 hardcover 1126 pages

Cat. no. 750

\$23.95

UNUSUAL PROJECTS!

MECHANICS NOTE-BOOK 20

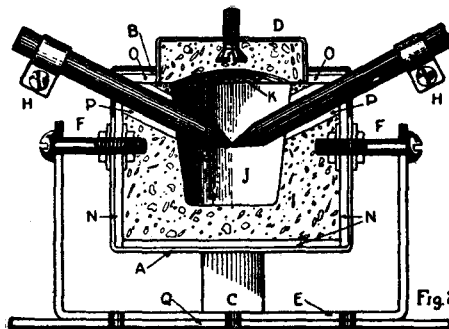
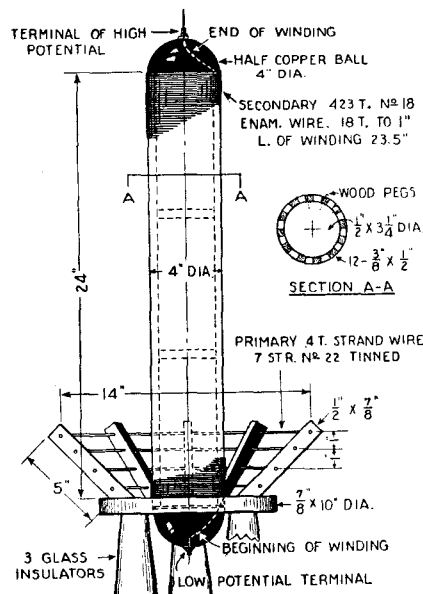
Old Magazine Plans reprinted by Lindsay Publications

Just after the first world war, unusual, often downright strange magazines appeared on the market to take care of the public's hunger for news on inventions and scientific experiments.

After years of searching and many dollars expended, we managed to accumulate a couple of dozen copies of various magazines such as "Everyday Engineering Magazine", "Electrical Experimenter", "Practical Electrics" and "Science and Invention".

Although most of the articles are ridiculously funny because of their inaccurate theory, wrong conclusions, or prediction of bizarre future inventions, there are a few really inter-

esting construction articles that are still useful today. In this oversize notebook you get the winners.



grinder having a 6"x6" table.

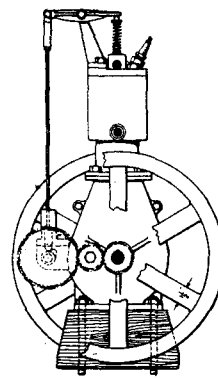
You get plans for a universal lathe attachment that the author claims is good for surface grinding, indexing, shaping, planing and milling. Build yourself a one-lung one horsepower overhead valve gas engine from scratch.

And you get plans for a 24" Tesla coil, parts of which have been reprinted many times over the years, including in our own "Tesla Coil Secrets". Here, you get every word and every drawing. Nothing has been left out.

We can't tell how many of these plans were actually built and proven. At the very least, they'll give you many new ideas. This is detailed how-to from magazines published from September 1918 to February 1926.

It has been long, difficult, and expensive process to accumulate this information. And although you may never get your hands on the originals, at least you can get the plans they contained. Any builder will find this fascinating reading. Get a copy. 8 1/2 x 11 booklet 22 pages

Cat. no. 848



\$5.95

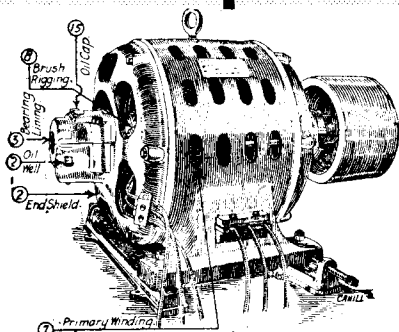
ARMATURE WINDING and Motor Repair!

ARMATURE WINDING AND MOTOR REPAIR

by Daniel H. Braymer

From 1920 comes this motor rewinding book loaded with drawings and photographs that will show you how to build both AC and DC machines.

Chapters include: DC machines, AC machines, shop methods of rewinding DC armatures, making commutator connections, testing DC armature windings, operations before and after winding DC armatures, insulating coils and slots for winding, shop methods for rewinding AC machines, testing induction motor windings for mistakes and faults, adapting DC motors to changed operating conditions, practical ways for reconnecting induction motors, commutator repairs, adjusting brushes and correcting brush troubles, inspection and repair of motor starters and gen-

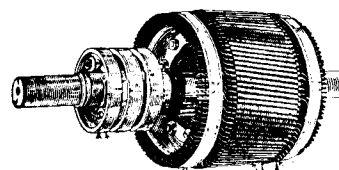


Classic 1920 Text!

niques from removing old windings and cleaning slots, to winding the coils, insulating the end connections, inserting the coils, painting the windings, relining split bearings, and much more. You get data on all types of wave and lap windings, varnishing and insulating materials, and much more.

I make you no promises, but this is the logical place to start should you want to rewind a motor to particular voltage, wind a generator or alternator for use with a windmill or waterwheel, re-winding a big generator for use as a welder, modify a DC motor for use in an electric car, and so on.

This is a beautiful book. You get over 500 pages of clearly written, wall-to-wall practical how-to with excellent illustrations. This is as good as, and in most cases, is much better than, any motor book

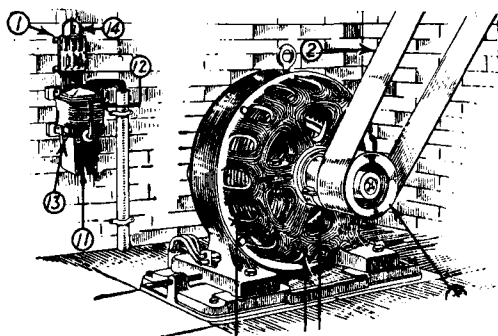


erators, diagnosis of troubles, methods to solve special troubles, tables and more.

One special chapter at the back will show you how to build the special tools and jigs, an armature sling, a pinion puller, coil winding machine, a coil taping machine, commutator slotter, armature banding machine and more.

The motors described are large types used in factories. But the principles apply to the smaller motors you and I use. You'll learn how to reconnect induction motors for different voltages and phases, how to operate a DC motor as a generator and visa-versa, change the DC motor windings for different voltages, and more.

You'll be taught all the tech-



I've carried in the past, regardless of price. It's a gem that should be in the reference library of most "machine freaks" (that includes you, son). Order one as soon as you can. 5 1/2 x 8 1/2 paperback 540 pages

Cat. no. 4384

\$16.95

ALTERNATOR SECRETS

If you know the secrets of modification, you can get large amounts of power from a common auto alternator. You can build a portable powerplant driven by a gasoline engine to run brush-type power tools, lights, and AC-DC appliances at remote locations. You can hot-charge storage batteries, or even do light arc welding. Operation of the regulator is explained so that you can build a custom regulator, if needed, to provide regulated output voltages other than 12.

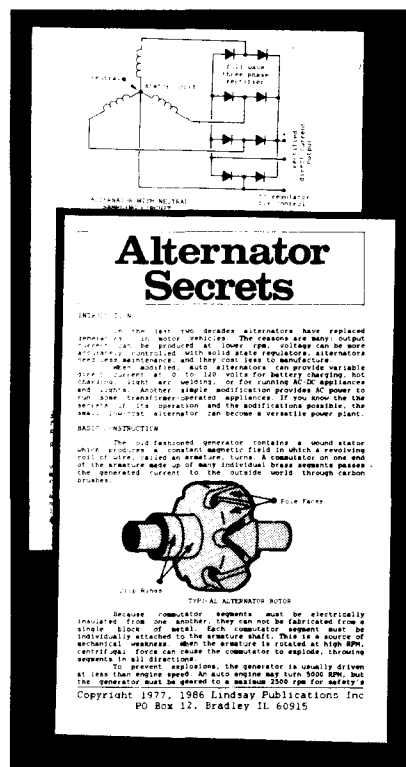
Learn how you can make almost an ordinary induction motor (like an old washing machine motor) put out 120 volts at 60 cycles without rewinding or internal rewiring. These secrets are worth the price of the booklet alone.

We've jammed a ton of information into 16 pages with small type to keep printing costs down so that we can keep the retail price the same as the old edition. Valuable, rare info! Get a copy. 5 1/2 x 8 1/2 booklet 16 pages

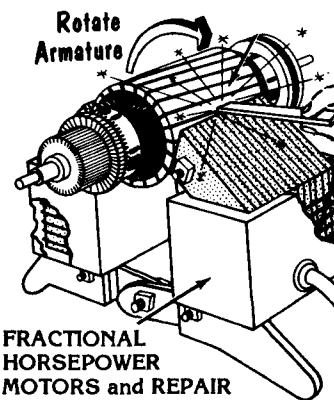
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Power from Alternators!



SMALL MOTORS & Their Repair

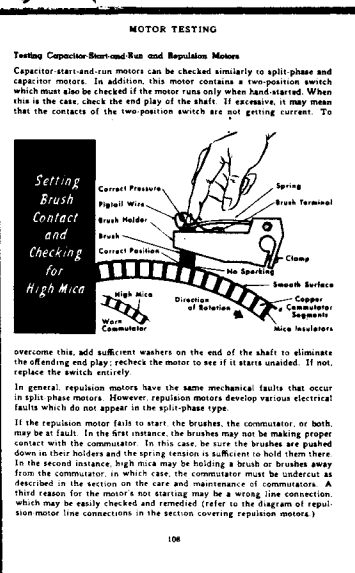


FRACTIONAL HORSEPOWER MOTORS AND REPAIR

by Gerald Schweitzer

When one of your shop motors fails, chances are this book can show you how to fix it. Fractional HP is loaded with top-rate illustrations, exploded views, wiring diagrams of the windings, starters, and protection devices found on almost all small motors.

You'll learn about induction motors, split-phase, capacitor, repulsion, shaded-pole, universal, and three-phase motors. Learn about testing, maintenance, control and protective devices. Covers simple repairs, but not rewinding proce-



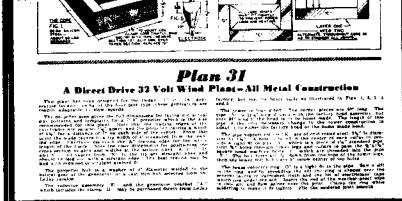
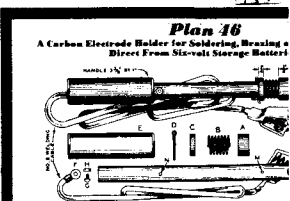
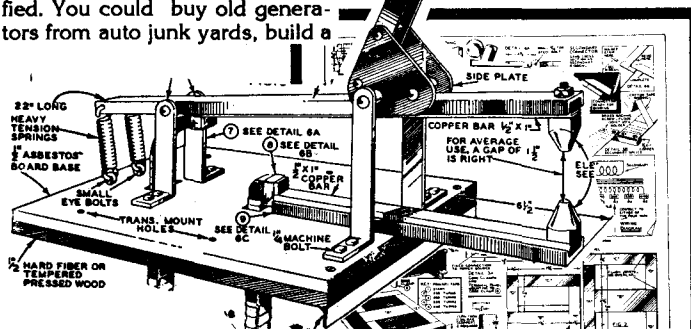
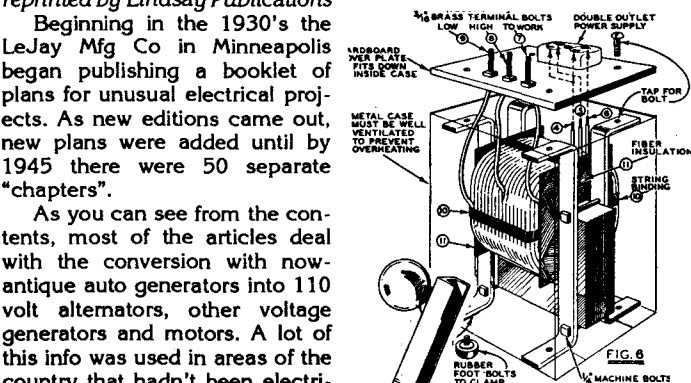
dures. Get a copy of this valuable reference book for your technical library today! 6 x 9 168 pages. Cat. No. 32 \$13.50

LeJay Manual

LeJay Manual - 1945 Edition
by Lawrence D. Leach
reprinted by Lindsay Publications

Beginning in the 1930's the LeJay Mfg Co in Minneapolis began publishing a booklet of plans for unusual electrical projects. As new editions came out, new plans were added until by 1945 there were 50 separate "chapters".

As you can see from the contents, most of the articles deal with the conversion with now-antique auto generators into 110 volt alternators, other voltage generators and motors. A lot of this info was used in areas of the country that hadn't been electrified. You could buy old generators from auto junk yards, build a



worth the entire price of the publication. For instance, you can build a small but useful spot welder powered by nothing more than a string of auto batteries. You get plans for an arc welder, a transformer spot welder, a carbon-arc torch, electric bicycle, a water wheel, windmills and more. And they're all well illustrated.

This is a manual worth having in your reference library. You may not be able to use all of the information, but you'll get so many ideas even from those chapters you can't use, that you'll find this manual to be worth many times its retail price.

Great ideas. Fun to read. Useful projects. Worth having. Order a copy! 8 1/2 x 11 booklet 32 pages

Cat. no. 20013

\$5.95

Contents

- Plans for 110 Volt AC Light Plant made from Ford Model "T" Generator
- 200 Watt AC Generator for Automobile Made from Ford Model "A" Powerhouse
- A 6 Volt Slow Speed Generator (with plans for all-metal windmill)
- 6 Volt & 12 Volt Slow Speed Generators from Dodge "G" or "GA" Northeast Generator also from other Generators
- A 32 volt slow speed wind light Plant Generator
- One 32 Volt Motor, One 110 Volt Motor, One 32 Volt Generator, One 110 Volt Generator from Dodge Generator
- How to Make a Grinder, Series Motor, Constant Speed Motor, A Universal AC or DC Motor and a Soldering Iron
- A 75 to 110 Ampere Arc Welder Made from Dodge "G" or "GA" Generator. Also Dual Welders.
- Pendulum Type Fence Controller made from Ford "T" Coil
- Plans for Building a Complete Wind Light Plant Including Tower, Propeller and Generator Charger
- A 110 Volt AC Light Plant Generator
- A "B" Eliminator For Your Battery Operated Radio
- An Automobile Generator Booster Control
- A 6 Volt Slow Speed Generator from Standard 14 Slot 28 Bar Generator
- A 32 Volt Constant Speed Generator made from Ford "T" Generator
- A 2 Volt Slow Speed Generator from Standard 14 Slot 28 Bar Generator
- How to Convert A 6 Volt Cut-Out for 2 Volt Operation
- Directions for Repairing Your Own Batteries
- A Water Wheel Made from Old Automobile Wheel
- An Electric Outboard Motor from Old Ford "T" Generator
- A Gas Engine or Motor Driven Generator with Drawings in Detail
- An Armature Growler for Testing Auto or Slow Speed Armatures
- Two 32 Volt Series Motors from Dodge "G" or "GA" Generator
- A 32 Volt Heavy Duty Motor made from Dodge "G" or "GA" Generator
- A Bench or Breast Drill for 6, 12, or 32 Volts from "T" Generator
- A 6 Volt Motor for Drill Press, Washing Machines, etc. made from Model "T" Generator
- One 12 volt Motor and One 32 volt Motor Made from Model "T" Generator
- Two 6 Volt Generators from the Dodge, also general information
- A 110 V. or 220 VAC Portable Transformer for Arc Welding
- A 110 Volt Spot Welder — 1 Kw. Input Normal Draw 10 to 11 Amps
- A Direct Drive 32 Volt Wind Plant — All Metal Construction
- A Battery Spot Welder
- 32 Armature Diagrams for Autolite, Bosch-Autolite and Bosch Generators
- 34 Armature Diagrams for Delco, Delco-Remy, & Remy Generators
- 35 Armature Diagrams for Ford A, B and V8 Generators
- 36 Armature Diagrams for Northeast Generators
- 37, 38 Armature Diagrams for Atwater-Kent & Dyneto Generators
- 39 Armature Diagrams for Leece-Neville Generators
- 40 Armature Diagrams for Wagner Generators
- 41 Armature Diagrams for Westinghouse Generators
- 42 Plans for Installing Lights on Your Tractor
- 43 Two Types 110 Volt AC Insect Exterminators
- 44 An Electric Scooter Using a 6 or 12 volt Battery for Power
- 45 An Electric "Go Bike" Using a 6 or 12 volt Battery for Power
- 46 A Carbon Electrode Holder for Soldering, Brazing and Light Welding Direct from Six-volt Storage Batteries
- 47 Ball Type Fence Controller Made from Ford "T" Coil
- 48 110 Volt AC 500 Watt Self Excited Generator from Dodge Model "G" or "GA" generator
- 49 110 Volt AC 60 Cycle 1/2 HP Synchronous Motor from Dodge Model "G" or "GA" Generator
- 50 An AC Welding Transformer Using Dodge Generator Coils
- Appendix Windpower Information, Definitions, etc.

windmill, repair old auto batteries, use the electricity generated to power homebuilt motors, welders and so on.

Most of the information in this booklet is now of limited value simply because you can't get the generators listed. But rewinding data, hints and tips provided can help you in other rewinding projects for other types of generators.

There ARE several projects in this booklet any one of which is

Storage Batteries Simplified!

STORAGE BATTERIES SIMPLIFIED

by Victor Page

reprinted by Lindsay Publications

It's old, 1917 to be exact, but it's damned good. Modern storage batteries have plastic cases and plate separators, but in operation, performance, and maintenance batteries really haven't changed too much since this book was first published.

Five chapters cover simple lead plate batteries, Plante plates, pasted plates, Edison batteries, details of plate construction, Gould plates, Exide plates, separator function and more. One whole chapter deals with battery defects, how to make electrolyte, dismantling and repairing batteries. You get full details on how to charge batteries, plus a chapter on their use covering auto starting and lighting, electric autos, railroad use, street cars, mines and even WWI submarines!

I don't think the battery repair instructions will be very useful with modern batteries, and I wouldn't even try to build some of the battery chargers described. Nevertheless, there is so much excellent material here that I give it high marks. Loaded with photographs, drawings and charts. 5 1/2 x 8 1/2 paperback 220 pages Cat. no. 4473 \$8.95

STORAGE BATTERIES SIMPLIFIED

You need to know how to get the most out of your battery. This book is the only one that gives you the secrets of battery construction, operation, and maintenance. It is the only book that gives you the secrets of battery construction, operation, and maintenance. It is the only book that gives you the secrets of battery construction, operation, and maintenance.

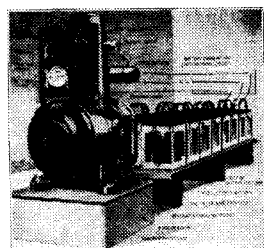


Fig. 1. Shows the series line connecting three or four to the storage battery.

Storage Batteries to Electric Power Lightings—The simple and easy way to get the most out of your battery. This book is the only one that gives you the secrets of battery construction, operation, and maintenance. It is the only book that gives you the secrets of battery construction, operation, and maintenance.

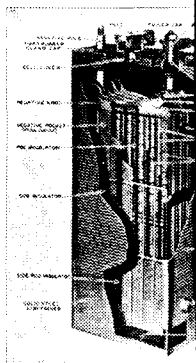
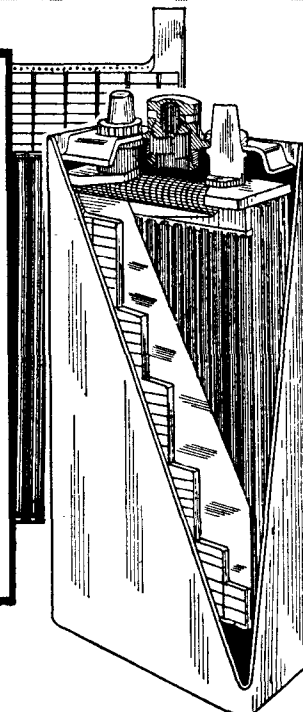


Fig. 2. Shows the internal construction of a storage battery. The diagram shows the internal construction of a storage battery. The diagram shows the internal construction of a storage battery.



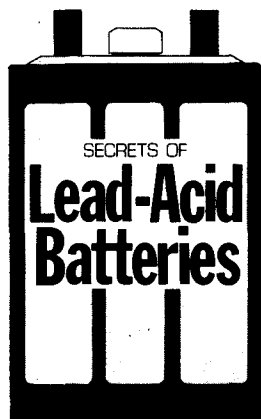
Lead-Acid Batteries & How They Work!

SECRETS OF LEAD-ACID BATTERIES

To get the most out of lead-acid cells whether you used them in your auto, an electric car, an alternate energy system or other application, you should know what's in this jam-packed booklet.

You'll learn how batteries are rated, built, the different types of charging, how they discharge and why they fail. Learn to quick charge, equalize cells, and even perform a "rejuvenation" treatment that helps some "sick" batteries. Testing of used batteries and electric auto applications are also discussed.

This is much more than basic information but without heavy mathematics and chemistry. Get a copy! 5 1/2 x 8 1/2 booklet 44 pages Cat. no. 86



\$5.00

Convert DC into 110 Volt 60 Cycle AC!

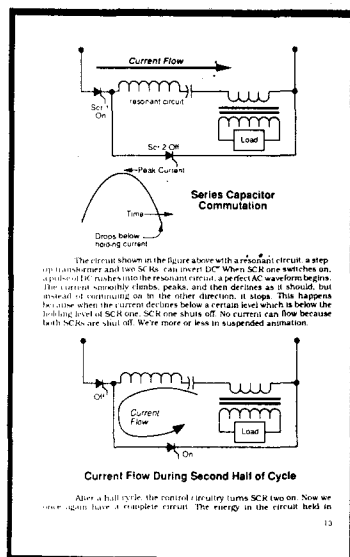
POWER INVERTER TECHNOLOGY

You can convert 12 volts DC into 120 volts AC 60 cycle with an electronic inverter. If you're intending to invest in an inverter, there's more to know than just its cost and power rating. Do you know what type of design it is? Can it handle high power factors without blowing the transistors or SCRs? Can it lock to the local power grid?

Learn about these problems and much more in this popular jam-packed technical report. Learn about transistors, SCRs, series and parallel commutation, waveform filters, back current flow, and much more. You'll get reports on several commercial inverters, names and addresses of a variety of manufacturers, and sources for free plans should you want to attempt building an inverter.

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They Have Lindsay!

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We had him locked in the warehouse for a while, and business was moving along smoothly. When we weren't looking, he chewed a hole in the side of the steel building with his upper plate and escaped.

The next day we found him in his office with a new stereo cranked all the way up. It was heavy metal music one minute and country & western the next. When he started in with Beethoven and Bach, the neighbors got up a petition and had the guy put away (for good we hope).

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